

THE
INDIAN YEAR BOOK
1916.

A STATISTICAL AND HISTORICAL ANNUAL OF
THE INDIAN EMPIRE, WITH AN
EXPLANATION OF THE
PRINCIPAL TOPICS
OF THE DAY

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CALENDAR FOR 1916.

January.

S	2	9	16	23	30
M	3	10	17	24	31
Tu	4	11	18	25	
W	5	12	19	26	
Th	6	13	20	27	...
F	..	...	7	14	21	28	
S	...	1	8	15	22	29	

February

S	.	...	6	13	20	27	
M	.	...	7	14	21	28	
Tu	...	1	8	15	22	29	
W	...	2	9	16	23		
Th	...	3	10	17	24	..	
F	..	4	11	18	25	..	
S	.	5	12	19	26		

March

S	...	...	5	12	19	26	
M	...	...	6	13	20	27	
Tu	...	...	7	14	21	28	
W	..	1	8	15	22	29	
Th	..	2	9	16	23	30	
F	..	3	10	17	24	31	
S	...	4	11	18	25		

April.

S	...	...	2	9	16	23	30
M	..	...	3	10	17	24	
Tu	...	...	4	11	18	25	
W	...	...	5	12	19	26	
Th	..	...	6	13	20	27	
F	..	...	7	14	21	28	..
S	..	1	8	15	22	29	

May.

S.	.....	..	7	14	21	28	...
M	.....	1	8	15	22	29	..
Tu	.....	2	9	16	23	30	
W	..	3	10	17	24	31	..
Th	...	4	11	18	25	...	...
F	.	5	12	19	26	...	..
S	.	6	13	20	27	..	...

June

S	....	..	4	11	18	25	..
M	....	...	5	12	19	26	
Tu	....	...	6	13	20	27	...
W	....	.	7	14	21	28	...
Th	...	1	8	15	22	29	..
F	....	2	9	16	23	30	..
S	..	3	10	17	24	...	

July

S	...	...	2	9	16	23	30
M	...	...	3	10	17	24	31
Tu	..	...	4	11	18	25	
W	...	...	5	12	19	26	
Th	..	...	6	13	20	27	...
F	..	...	7	14	21	28	...
S	...	1	8	15	22	29	

August

S	.	...	6	13	20	27	..
M.	.	...	7	14	21	28	
Tu	..	1	8	15	22	29	
W	.	2	9	16	23	30	
Th	...	3	10	17	24	31	
F	..	4	11	18	25	..	
S	..	5	12	19	26		

September

S	...	...	3	10	17	24	
M	...	...	4	11	18	25	
Tu	..	...	5	12	19	26	
W	...	...	6	13	20	27	
Th	...	...	7	14	21	28	
F	..	1	8	15	22	29	
S	...	2	9	16	23	30	

October

S	...	1	8	15	22	29	
M	..	2	9	16	23	30	..
Tu	...	3	10	17	24	31	
W	...	4	11	18	25	..	..
Th	..	5	12	19	26	..	..
F	...	6	13	20	27	..	..
S	..	7	14	21	28	..	...

November

S	...	...	5	12	19	26	...
M	..	...	6	13	20	27	..
Tu	...	...	7	14	21	28	...
W	...	1	8	15	22	29	..
Th	...	2	9	16	23	30	...
F	...	3	10	17	24		..
S	...	4	11	18	25		...

December.

S.	....	...	3	10	17	24	31
M	....	...	4	11	18	25	...
Tu	....	...	5	12	19	26	
W.	....	...	6	13	20	27	...
Th	...	...	7	14	21	28	...
F	...	1	8	15	22	29	...
S	....	2	9	16	23	30	

Phases of the Moon—FEBRUARY 29 Days

● New Moon
 ☾ First Quarter
 In Perigee

3rd, 9h 35 6m P M
 11th, 3h 50 4m A M
 2nd, 5 6h A M

○ Full Moon
 ☾ Last Quarter
 In Apogee

19th, 7h 7 6m A M
 26th, 2h 53 8m P M
 11th, 2 9h A M

Day of the Week	Day of the Month	Day of the Year	Mean Time			Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A M	Sunset P M	True Noon		
			H M	H M	H M	D	S
Tuesday	1	32	7 14	6 31	0 51	27 10	17 27
Wednesday	2	33	7 13	6 32	0 52	28 10	17 11
Thursday	3	34	7 13	6 33	0 53	29 10	16 53
Friday	4	35	7 13	6 33	0 53	0 63	16 36
Saturday	5	36	7 12	6 34	0 53	1 63	16 18
Sunday	6	37	7 12	6 34	0 53	2 63	16 0
Monday	7	38	7 12	6 35	0 53	3 63	15 42
Tuesday	8	39	7 11	6 35	0 53	4 63	15 23
Wednesday	9	40	7 11	6 36	0 53	5 63	15 5
Thursday	10	41	7 10	6 36	0 53	6 63	14 45
Friday	11	42	7 10	6 37	0 53	7 63	14 32
Saturday	12	43	7 9	6 37	0 53	8 63	14 7
Sunday	13	44	7 9	6 37	0 53	9 63	13 47
Monday	14	45	7 9	6 38	0 53	10 63	13 27
Tuesday	15	46	7 8	6 39	0 53	11 63	13 7
Wednesday	16	47	7 7	6 39	0 53	12 63	12 46
Thursday	17	48	7 7	6 40	0 53	13 63	12 25
Friday	18	49	7 6	6 40	0 53	14 63	12 5
Saturday	19	50	7 6	6 40	0 53	15 63	11 44
Sunday	20	51	7 5	6 41	0 53	16 63	11 22
Monday	21	52	7 5	6 41	0 53	17 63	11 1
Tuesday	22	53	7 4	6 42	0 53	18 63	10 39
Wednesday	23	54	7 3	6 42	0 52	19 63	10 18
Thursday	24	55	7 3	6 42	0 52	20 63	9 56
Friday	25	56	7 2	6 43	0 52	21 63	9 34
Saturday	26	57	7 1	6 43	0 52	22 63	9 11
Sunday	27	58	7 1	6 43	0 52	23 63	8 49
Monday	28	59	7 0	6 44	0 52	24 63	8 27
Tuesday	29	60	6 59	6 44	0 52	25 63	8 4

Phases of the Moon—MARCH 31 Days

1st Quarter 10h, 10m 56.7m PM
 New Moon 26h, 0m 52.4m PM
 Full Moon 26h 6.7 PM

Day of the Week	Day of the Month	Sun at AM	Sun at PM	Mean Time		Moon's Age at Noon	Sun's Declination at Mean Noon
				h	m		
Monday	1	6	44	0	51	26 63	7 41
Tuesday	2	6	45	0	51	27 63	7 18
Wednesday	3	6	45	0	51	28 63	6 56
Thursday	4	6	45	0	51	0 14	6 33
Friday	5	6	46	0	50	1 14	6 9
Saturday	6	6	46	0	50	2 14	5 46
Sunday	7	6	46	0	50	3 14	5 23
Monday	8	6	47	0	50	4 14	5 0
Tuesday	9	6	47	5	50	5 14	4 36
Wednesday	10	6	47	0	49	6 14	4 13
Thursday	11	6	45	0	49	7 14	3 49
Friday	12	6	48	0	49	8 14	3 26
Saturday	13	6	48	0	48	9 14	3 2
Sunday	14	6	48	0	46	10 14	2 38
Monday	15	6	47	0	48	11 14	2 15
Tuesday	16	6	46	0	48	12 14	1 51
Wednesday	17	6	45	0	47	13 14	1 27
Thursday	18	6	44	0	47	14 14	1 4
Friday	19	6	44	0	47	15 14	0 40
Saturday	20	6	43	0	46	16 14	0 16
Sunday	21	6	42	0	46	17 14	0 17
Monday	22	6	41	0	46	18 14	0 31
Tuesday	23	6	40	0	46	19 14	0 55
Wednesday	24	6	39	0	45	20 14	1 19
Thursday	25	6	39	0	45	21 14	1 42
Friday	26	6	38	0	45	22 14	2 6
Saturday	27	6	37	0	44	23 14	2 29
Sunday	28	6	37	0	44	24 14	2 53
Monday	29	6	36	0	44	25 14	3 16
Tuesday	30	6	35	0	43	26 14	3 39
Wednesday	31	6	34	0	43	27 14	4 3

Phases of the Moon—APRIL 30 Days

● New Moon ... 2nd, 9h 51 2m P M
 ☾ First Quarter 10th, 8h 57m P M
 In Apogee 9th, 7 2h P M

○ Full Moon .. 18th, 10h 37^hm A M
 ☾ Last Quarter 25th 4h 8^hm A M
 In Perigee . 21st, 5 1h P M

Day of the Week.	Day of the Month	Day of the Year	Mean Time						Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A M		Sunset P M		True Noon			
			H	M	H	M	H	M	D	N.
Saturday	1	92	6	33	6	53	0	43	23 11	4 26
Sunday	2	93	6	33	6	53	0	43	23 14	4 40
Monday	3	94	6	32	6	53	0	42	0 62	5 12
Tuesday	4	95	6	31	6	53	0	42	1 62	5 35
Wednesday	5	96	6	30	6	54	0	42	2 62	5 58
Thursday	6	97	6	29	6	54	0	41	3 62	6 21
Friday	7	98	6	28	6	54	0	41	4 62	6 48
Saturday	8	99	6	28	6	54	0	41	5 62	7 6
Sunday	9	100	6	27	6	54	0	40	6 62	7 28
Monday	10	101	6	26	6	54	0	40	7 62	7 50
Tuesday	11	102	6	25	6	55	0	40	8 62	8 13
Wednesday	12	103	6	24	6	55	0	40	9 62	8 35
Thursday	13	104	6	24	6	55	0	39	10 62	8 57
Friday	14	105	6	23	6	56	0	39	11 62	9 18
Saturday	15	106	6	22	6	56	0	39	12 62	9 40
Sunday	16	107	6	21	6	56	0	39	13 62	10 1
Monday	17	108	6	21	6	56	0	38	14 62	10 22
Tuesday	18	109	6	20	6	57	0	38	15 62	10 44
Wednesday	19	110	6	19	6	57	0	38	16 62	11 4
Thursday	20	111	6	19	6	57	0	38	17 62	11 25
Friday	21	112	6	18	6	57	0	38	18 62	11 46
Saturday	22	113	6	17	6	57	0	37	19 62	12 6
Sunday	23	114	6	16	6	58	0	37	20 62	12 26
Monday	24	115	6	16	6	58	0	37	21 62	12 46
Tuesday	25	116	6	15	6	58	0	37	22 62	13 6
Wednesday	26	117	6	14	6	59	0	37	23 62	13 25
Thursday	27	118	6	14	6	59	0	36	24 62	13 45
Friday	28	119	6	13	7	0	0	36	25 62	14 4
Saturday	29	120	6	12	7	0	0	36	26 62	14 22
Sunday	30	121	6	12	7	0	0	36	27 62	14 41

Phases of the Moon—JUNE 30 Days

● New Moon
 ☾ First Quarter
 ☽ In Apogee

1st, 1h 7 3m A M
 9th, 5h 29 0m A M
 4th, 3 0h A M

○ Full Moon
 ☾ Last Quarter
 ● New Moon
 In Perigee

16th, 3h 11 7m A M
 22nd, 6h 46 4m P M
 30th, 1h 13 1m P M
 16th, 4 1h P M

Day of the Week	Day of the Month	Day of the Year	Mean Time						Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A M		Sunset P M		True Noon			
			H	M	H	M	H	M			D	N
Thursday	1	153	6	1	7	12	0	36	0 49	22 1
Friday	2	154	6	1	7	12	0	36	1 48	22 9
Saturday	3	155	6	1	7	13	0	37	2 48	22 17
Sunday	4	156	6	1	7	13	0	37	3 48	22 24
Monday	5	157	6	1	7	14	0	37	4 48	22 31
Tuesday	6	158	6	1	7	14	0	37	5 48	22 38
Wednesday	7	159	6	1	7	14	0	37	6 48	22 44
Thursday	8	160	6	1	7	15	0	38	7 48	22 50
Friday	9	161	6	1	7	15	0	38	8 48	22 55
Saturday	10	162	6	1	7	15	0	38	9 48	23 0
Sunday	11	163	6	1	7	16	0	38	10 48	23 4
Monday	12	164	6	1	7	16	0	38	11 48	23 8
Tuesday	13	165	6	1	7	16	0	39	12 48	23 12
Wednesday	14	166	6	1	7	17	0	39	13 48	23 15
Thursday	15	167	6	1	7	17	0	39	14 48	23 18
Friday	16	168	6	1	7	17	0	39	15 48	23 21
Saturday	17	169	6	1	7	17	0	40	16 48	23 23
Sunday	18	170	6	2	7	18	0	40	17 48	23 25
Monday	19	171	6	2	7	18	0	40	18 48	23 26
Tuesday	20	172	6	2	7	18	0	40	19 48	23 27
Wednesday	21	173	6	2	7	18	0	40	20 48	23 27
Thursday	22	174	6	3	7	19	0	41	21 48	23 27
Friday	23	175	6	3	7	19	0	41	22 48	23 27
Saturday	24	176	6	3	7	19	0	41	23 48	23 26
Sunday	25	177	6	3	7	19	0	41	24 48	23 25
Monday	26	178	6	3	7	19	0	41	25 48	23 23
Tuesday	27	179	6	4	7	19	0	42	26 48	23 21
Wednesday	28	180	6	4	7	20	0	42	27 48	23 18
Thursday	29	181	6	4	7	20	0	42	28 48	23 15
Friday	30	182	6	5	7	20	0	42	29 48	23 12

Phases of the Moon—JULY 31 Days.

☾ First Quarter 8th 5h 25 0m P M
 ○ Full Moon 15th 10h 10 0m A M
 In Apogee 1st 9 7h A M

☾ Last Quarter 22nd, 5h 3 0m A M
 ● New Moon 30th, 7h 45 4m A M
 In Perigee 15th, 5 8h A M
 25th 1 0h P M

Day of the Week	Day of the Month	Day of the Year	Mean Time						Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A.M.		Sunset P.M.		True Noon			
			H	M	H	M	H	M	D	N,
Saturday	1	183	6	5	7	20	0	42	0 85	23 9
Sunday	2	184	6	5	7	20	0	42	1 85	23 4
Monday	3	185	6	6	7	20	0	43	2 85	23 0
Tuesday	4	186	6	6	7	20	0	43	3 85	22 55
Wednesday	5	187	6	6	7	20	0	43	4 85	22 50
Thursday	6	188	6	7	7	20	0	43	5 85	22 44
Friday	7	189	6	7		20	0	44	6 05	22 38
Saturday	8	190	6	7	7	20	0	44	7 85	22 31
Sunday	9	191	6	8	7	20	0	44	8 85	22 25
Monday	10	192	6	8	7	20	0	44	9 85	22 17
Tuesday	11	193	6	8	7	20	0	44	10 85	22 10
Wednesday	12	194	6	9	7	20	0	44	11 85	22 2
Thursday	13	195	6	9	7	20	0	44	12 85	21 53
Friday	14	196	6	9	7	20	0	44	13 85	21 44
Saturday	15	197	6	9	7	20	0	45	14 85	21 35
Sunday	16	198	6	10	7	19	0	45	15 85	21 26
Monday	17	199	6	10	7	19	0	45	16 85	21 16
Tuesday	18	200	6	10	7	19	0	45	17 85	21 6
Wednesday	19	201	6	11	7	19	0	45	18 85	20 55
Thursday	20	202	6	11	7	19	0	45	19 85	20 44
Friday	21	203	6	12	7	19	0	45	20 85	20 33
Saturday	22	204	6	12	7	18	0	45	21 85	20 21
Sunday	23	205	6	13	7	18	0	45	22 85	20 9
Monday	24	206	6	13	7	17	0	45	23 85	19 57
Tuesday	25	207	6	14	7	17	0	45	24 85	19 44
Wednesday	26	208	6	14	7	17	0	45	25 85	19 31
Thursday	27	209	6	14	7	16	0	45	26 95	19 18
Friday	28	210	6	14	7	16	0	45	27 85	19 4
Saturday	29	211	6	15	7	16	0	45	28 85	18 50
Sunday	30	212	6	15	7	15	0	45	0 21	18 36
Monday	31	213	6	15	7	15	0	45		

Phases of the Moon—AUGUST 31 Days.

☾ First Quarter 7th, 2h 35 6m A M
 ○ Full Moon 13th, 5h 30 3m P M
 ♀ In Perigee 12th, 2 8h P M

☾ Last Quarter 20th 6h 24 9m P M
 ● New Moon 24th 10h 54 7m P M
 ♀ In Apogee 21th, 10 5h P M

Day of the Week	Day of the Month	Day of the Year	Mean Time			Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A M	Sunset P M	True Noon		
			H M	H M	P M	D	°
Tuesday	1	214	6 10	7 11	0 15	2 21	18 7
Wednesday	2	215	6 10	7 14	0 15	3 21	17 52
Thursday	3	216	6 10	7 14	0 45	4 21	17 36
Friday	4	217	6 17	7 13	0 45	5 21	17 20
Saturday	5	218	6 17	7 13	0 15	6 21	17 4
Sunday	6	219	6 17	7 12	0 45	7 21	16 48
Monday	7	220	6 18	7 11	0 44	8 21	16 31
Tuesday	8	221	6 18	7 11	0 44	9 21	16 15
Wednesday	9	222	6 18	7 11	0 44	10 21	15 5
Thursday	10	223	6 18	7 10	0 14	11 21	15 29
Friday	11	224	6 10	7 9	0 14	12 21	15 21
Saturday	12	225	6 10	7 9	0 44	13 21	15 5
Sunday	13	226	6 19	7 8	0 44	14 21	14 47
Monday	14	227	6 20	7 7	0 43	15 21	14 28
Tuesday	15	228	6 20	7 7	0 43	16 31	14 10
Wednesday	16	229	6 20	7 6	0 43	17 21	13 51
Thursday	17	230	6 20	7 6	0 43	18 21	13 32
Friday	18	231	6 21	7 5	0 43	19 21	13 13
Saturday	19	232	6 21	7 4	0 42	20 21	12 53
Sunday	20	233	6 21	7 3	0 42	21 21	12 34
Monday	21	234	6 22	7 3	0 42	22 21	12 14
Tuesday	22	235	6 22	7 2	0 42	23 21	11 54
Wednesday	23	236	6 22	7 1	0 41	24 21	11 34
Thursday	24	237	6 22	7 1	0 41	25 21	11 13
Friday	25	238	6 22	7 0	0 41	26 21	10 53
Saturday	26	239	6 23	6 59	0 41	27 21	10 32
Sunday	27	240	6 23	6 58	0 40	28 21	10 11
Monday	28	241	6 23	6 57	0 40	29 21	9 50
Tuesday	29	242	6 23	6 56	0 40	0 57	9 29
Wednesday	30	243	6 23	6 56	0 39	1 57	9 7
Thursday	31	244	6 24	6 56	0 39	2 57	8 46

Phases of the Moon—SEPTEMBER 30th Days

☾ First Quarter 5th 9h 50^m AM
 ☾ Full Moon 12th 2h 0^m AM
 ☾ In Perigee 9th 6^h PM

☾ Last Quarter 18th 11h 5^m AM
 ● New Moon 27th 1h 4^m PM
 ☾ In Apogee 21st 5^h PM

Day of the Week.	Day of the Month	Day of the Year	Mean Time			Moon's Age at Noon	Sun's Declination at Noon
			Sunrise A M	Sunset P M	True Noon		
			H M	H M	P M	D	N
Friday	1	245	6 24	6 54	0 38	3 57	8 24
Saturday	2	246	6 24	6 53	0 38	4 57	8 2
Sunday	3	247	6 24	6 53	0 38	5 57	7 40
Monday	4	248	6 24	6 52	0 38	6 57	7 18
Tuesday	5	249	6 25	6 51	0 37	7 57	6 56
Wednesday	6	250	6 25	6 50	0 37	8 57	6 34
Thursday	7	251	6 25	6 49	0 37	9 57	6 12
Friday	8	252	6 25	6 48	0 36	10 57	5 49
Saturday	9	253	6 25	6 47	0 36	11 57	5 26
Sunday	10	254	6 26	6 47	0 36	12 57	5 4
Monday	11	255	6 26	6 46	0 35	13 57	4 41
Tuesday	12	256	6 26	6 45	0 35	14 57	4 18
Wednesday	13	257	6 26	6 44	0 34	15 57	3 55
Thursday	14	258	6 26	6 43	0 34	16 57	3 22
Friday	15	259	6 26	6 42	0 34	17 57	3 9
Saturday	16	260	6 27	6 41	0 33	18 57	2 46
Sunday	17	261	6 27	6 40	0 33	19 57	2 23
Monday	18	262	6 27	6 39	0 33	20 57	2 0
Tuesday	19	263	6 27	6 39	0 32	21 57	1 36
Wednesday	20	264	6 27	6 38	0 32	22 57	1 13
Thursday	21	265	6 27	6 37	0 32	23 57	0 50
Friday	22	266	6 28	6 36	0 31	24 57	0 26
Saturday	23	267	6 28	6 35	0 31	25 57	0 7 ^S
Sunday	24	268	6 28	6 34	0 31	26 57	0 30
Monday	25	269	6 28	6 33	0 30	27 57	0 44
Tuesday	26	270	6 28	6 33	0 30	28 57	1 7
Wednesday	27	271	6 28	6 32	0 30	29 57	1 31
Thursday	28	272	6 29	6 31	0 29	0 98	1 54
Friday	29	273	6 29	6 30	0 29	1 98	2 17
Saturday	30	274	6 29	6 29	0 29	2 98	2 41

Phases of the Moon—OCTOBER 31 Days

☽ First Quarter 4th, 4h 30 5m P M
 ○ Full Moon 11th 0h 31 1m P M
 ♀ In Perigee 7th, 4 0h A M

☾ Last Quarter 19th, 6h 38 7m A M
 ● New Moon 27th, 2h 7 0m A M
 ♀ In Apogee 19th, 10 7h A M

C Day of the Week	Day of the Month	Day of the Year	Mean Time						Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise A M		Sunset P M		True Noon			
			H	M	H	M	H	M	D	S
Sunday	1	275	6	30	6	28	0	29	1 08	3 4
Monday	2	276	6	30	6	27	0	28	1 08	1 27
Tuesday	3	277	6	30	6	26	0	28	1 08	1 51
Wednesday	4	278	6	30	6	26	0	28	1 08	1 14
Thursday	5	279	6	30	6	25	0	27	1 08	1 37
Friday	6	280	6	31	6	24	0	27	1 08	1 0
Saturday	7	281	6	31	6	23	0	27	1 08	1 23
Sunday	8	282	6	31	6	22	0	27	10 08	1 46
Monday	9	283	6	31	6	21	0	26	11 08	6 9
Tuesday	10	284	6	31	6	20	0	26	12 08	6 32
Wednesday	11	285	6	32	6	19	0	26	13 08	6 55
Thursday	12	286	6	32	6	18	0	25	14 08	7 17
Friday	13	287	6	32	6	18	0	25	15 08	7 40
Saturday	14	288	6	33	6	17	0	25	16 08	8 2
Sunday	15	289	6	33	6	16	0	25	17 08	8 25
Monday	16	290	6	33	6	15	0	24	18 08	8 47
Tuesday	17	291	6	33	6	15	0	24	19 08	9 9
Wednesday	18	292	6	34	6	14	0	24	20 08	9 31
Thursday	19	293	6	34	6	13	0	24	21 08	9 53
Friday	20	294	6	34	6	13	0	24	22 08	10 7
Saturday	21	295	6	35	6	12	0	24	23 08	10 36
Sunday	22	296	6	35	6	11	0	24	24 08	10 57
Monday	23	297	6	35	6	11	0	23	25 08	11 18
Tuesday	24	298	6	35	6	10	0	23	26 08	11 39
Wednesday	25	299	6	36	6	10	0	23	27 08	12 0
Thursday	26	300	6	36	6	9	0	23	28 08	12 21
Friday	27	301	6	37	6	8	0	23	0 44	12 41
Saturday	28	302	6	37	6	8	0	23	1 44	13 2
Sunday	29	303	6	37	6	7	0	23	2 44	13 22
Monday	30	304	6	38	6	7	0	22	3 44	13 42
Tuesday	31	305	6	38	6	7	0	22	4 44	14 1

Phases of the Moon—NOVEMBER 23 Days.

☾ First Quarter 2th, 11h 20 0m P.M.
 ○ Full Moon 10th, 1h 48 0m A.M.
 In Perigee 1st, 0 3h A.M.

☾ Last Quarter 18th, 3h 30 5m A.M.
 ● New Moon 25th, 2h 20 4m P.M.
 In Apogee 16th, 7 5h A.M.
 In Perigee 28th, 1 2h A.M.

Day of the Week	Day of the Month	Day of the Year	Mean Time			Moon's Age at Noon	Sun's Declination at Mean Noon.
			Sunrise A.M.	Sunset P.M.	True Noon		
			H M	H M	H M P.M.	D	° S.
Wednesday	1	306	6 39	6 6	0 22	5 44	14 21
Thursday	2	307	6 39	6 6	0 22	6 44	14 40
Friday	3	308	6 40	6 5	0 22	7 44	14 59
Saturday	4	309	6 40	6 5	0 22	8 44	15 18
Sunday	5	310	6 41	6 4	0 22	9 44	15 36
Monday	6	311	6 41	6 4	0 22	10 44	15 54
Tuesday	7	312	6 42	6 3	0 22	11 44	16 12
Wednesday	8	313	6 42	6 3	0 23	12 44	16 30
Thursday	9	314	6 43	6 3	0 23	13 44	16 47
Friday	10	315	6 43	6 2	0 23	14 44	17 4
Saturday	11	316	6 44	6 2	0 23	15 44	17 21
Sunday	12	317	6 44	6 2	0 23	16 44	17 38
Monday	13	318	6 45	6 2	0 23	17 44	17 54
Tuesday	14	319	6 45	6 1	0 23	18 44	18 0
Wednesday	15	320	6 46	6 1	0 24	19 44	18 25
Thursday	16	321	6 47	6 1	0 24	20 44	18 41
Friday	17	322	6 47	6 1	0 24	21 44	18 55
Saturday	18	323	6 48	6 0	0 24	22 44	19 10
Sunday	19	324	6 48	6 0	0 24	23 44	19 24
Monday	20	325	6 49	6 0	0 24	24 44	19 38
Tuesday	21	326	6 49	6 0	0 25	25 44	19 52
Wednesday	22	327	6 50	6 0	0 25	26 44	20 5
Thursday	23	328	6 50	6 0	0 25	27 44	20 18
Friday	24	329	6 51	6 0	0 26	28 44	20 30
Saturday	25	330	6 51	6 0	0 26	29 44	20 41
Sunday	26	331	6 52	6 0	0 26	0 93	20 54
Monday	27	332	6 53	6 0	0 26	1 93	21 5
Tuesday	28	333	6 54	6 0	0 27	2 93	21 16
Wednesday	29	334	6 54	6 0	0 27	3 93	21 27
Thursday	30	335	6 55	6 0	0 27	4 93	21 37

Phases of the Moon—DECEMBER 31 Days.

☽ First Quarter 2nd, 7h 25 5m A M
 ○ Full Moon 9th, 6h 13 9m P M
 In Apogee 14th 2 3h A M

☾ Last Quarter 17th, 4h 36 4m P M
 ● New Moon 25th 2h 1 2m A M
 ☽ First Quarter 31st 5h 37 2m P M
 In Perigee 26th, 6 Ch A M

Day of the Week	Day of the Month	Day of the Year	Mean Time			Moon's Age at Noon	Sun's Declination at Mean Noon
			Sunrise, A M	Sunset P M	True Noon		
Friday	1	336	6 56	6 0	0 28	5 03	21 46
Saturday	2	337	6 56	6 1	0 28	6 03	21 56
Sunday	3	338	6 57	6 1	0 29	7 03	22 4
Monday	4	339	6 57	6 1	0 29	8 03	22 13
Tuesday	5	340	6 58	6 1	0 29	9 03	22 21
Wednesday	6	341	6 59	6 1	0 30	10 03	22 23
Thursday	7	342	6 59	6 1	0 30	11 03	22 30
Friday	8	343	7 0	6 2	0 31	12 03	22 42
Saturday	9	344	7 1	6 2	0 31	13 03	22 48
Sunday	10	345	7 1	6 2	0 32	14 03	22 54
Monday	11	346	7 2	6 3	0 32	15 03	22 59
Tuesday	12	347	7 2	6 3	0 32	16 03	23 4
Wednesday	13	348	7 3	6 3	0 33	17 03	23 9
Thursday	14	349	7 3	6 4	0 33	18 03	23 12
Friday	15	350	7 4	6 4	0 34	19 03	23 16
Saturday	16	351	7 5	6 4	0 34	20 03	23 19
Sunday	17	352	7 5	6 5	0 35	21 03	23 21
Monday	18	353	7 6	6 5	0 35	22 03	23 23
Tuesday	19	354	7 6	6 6	0 36	23 03	23 25
Wednesday	20	355	7 7	6 6	0 36	24 03	23 26
Thursday	21	356	7 7	6 7	0 37	25 03	23 27
Friday	22	357	7 8	6 7	0 37	26 03	23 27
Saturday	23	358	7 8	6 8	0 38	27 03	23 27
Sunday	24	359	7 9	6 8	0 38	28 03	23 26
Monday	25	360	7 9	6 9	0 39	0 45	23 25
Tuesday	26	361	7 10	6 9	0 39	1 45	23 23
Wednesday	27	362	7 10	6 10	0 40	2 45	23 21
Thursday	28	363	7 11	6 10	0 40	3 45	23 18
Friday	29	364	7 11	6 11	0 41	4 45	23 15
Saturday	30	365	7 11	6 12	0 41	5 45	23 12
Sunday	31	366	7 12	6 12	0 42	6 45	23 8

CALENDAR FOR 1917.

January.

S.	...	7	14	21	28	...
M.	...	1	8	15	22	29
Tu	...	2	9	16	23	30
W	...	3	10	17	24	31
Th	...	4	11	18	25	...
F.	...	5	12	19	26	...
S	...	6	13	20	27	...

February

S.	...	4	11	18	25	...
M	...	5	12	19	26	...
Tu	...	6	13	20	27	...
W.	...	7	14	21	28	...
Th	...	1	8	15	22	...
F.	...	2	9	16	23	...
S	...	3	10	17	24	...

March

S.	...	4	11	18	25	...
M	...	5	12	19	26	...
Tu	...	6	13	20	27	...
W	...	7	14	21	28	...
Th	...	1	8	15	22	29
F	...	2	9	16	23	30
S	...	3	10	17	24	31

April

S.	...	1	8	15	22	29
M.	...	2	9	16	23	30
Tu.	...	3	10	17	24	...
W.	...	4	11	18	25	...
Th	...	5	12	19	26	...
F.	...	6	13	20	27	...
S	...	7	14	21	28	...

May

S.	...	6	13	20	27	...
M	...	7	14	21	28	...
Tu	...	1	8	15	22	29
W	...	2	9	16	23	30
Th	...	3	10	17	24	31
F	...	4	11	18	25	...
S.	...	5	12	19	26	...

June

S.	...	3	10	17	24	...
M.	...	4	11	18	25	...
Tu	...	5	12	19	26	...
W.	...	6	13	20	27	...
Th	...	7	14	21	28	...
F	...	1	8	15	22	29
S	...	2	9	16	23	30

July.

S.	...	1	8	15	22	29
M	...	2	9	16	23	30
Tu	...	3	10	17	24	31
W.	...	4	11	18	25	...
Th	...	5	12	19	26	...
F	...	6	13	20	27	...
S	...	7	14	21	28	...

August.

S.	...	5	12	19	26	...
M	...	6	13	20	27	...
Tu	...	7	14	21	28	...
W	...	1	8	15	22	29
Th	...	2	9	16	23	30
F	...	3	10	17	24	31
S	...	4	11	18	25	...

September.

S.	...	2	9	16	23	30
M	...	3	10	17	24	...
Tu	...	4	11	18	25	...
W	...	5	12	19	26	...
Th	...	6	13	20	27	...
F	...	7	14	21	28	...
S	...	1	8	15	22	29

October

S.	...	7	14	21	28	...
M	...	1	8	15	22	29
Tu	...	2	9	16	23	30
W.	...	3	10	17	24	31
Th	...	4	11	18	25	...
F	...	5	12	19	26	...
S	...	6	13	20	27	...

November

S.	...	4	11	18	25	...
M	...	5	12	19	26	...
Tu.	...	6	13	20	27	...
W	...	7	14	21	28	...
Th	...	1	8	15	22	29
F	...	2	9	16	23	30
S	...	3	10	17	24	...

December

S.	...	2	9	16	23	30
M	...	3	10	17	24	31
Tu	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th	...	6	13	20	27	...
F	...	7	14	21	28	...
S	...	1	8	15	22	29

	PAGE		PAGE
Gold Reserve Fund ..	190	Paper Making	313
Gross Revenue . . .	193	Mines and Minerals	314
The Currency Commission	195	Industrial Arts	319
Railways	202	Fisheries	322
Inventions and Designs	213	Hall-marking of Plate	325
Railway Statistics	215	Tata Iron and Steel Co., Ltd	326
Irrigation	221	Bombay Hydro Electric Scheme	328
Canal Colonies	226	Factories inspected under the	
Buildings and Roads	233	Factory Act	329
Posts and Telegraphs	234	Opium Trade	339
Trade of India	238	Hides, Skins and Leather	341
India and Free Trade	247	Breweries	342
Indian Tariff Possibilities	248	Wild Birds Plumage	342
Indian Cotton Duties Act	249	Grain Elevators	343
Banking	252	Trade Marks	343
Exchange Banks	255	Indian Commercial Congress	344
Joint Stock Banks	256	Weights and Measures	345
Native Private Bankers and		Legislation and Inspection	347
Shroffs	258	Life Insurance	349
Bank Rate	259	Chambers of Commerce	342
Bankers' Clearing Houses	262	People of India	352
Failures of Indian Banks	264	Towns and Villages	354
Agriculture	267	Cities	356
Civil Veterinary Department	276	Religions	362
Meteorology	283	Sex	372
Monsoon of 1915	286	Marriage	372
The Textile Industry	287	Prices and Wages	381
Cotton Fires in Bombay	293	Indian Education	383
The Jute Industry	294	The Hindu University Movement	404
Glass and Glassware	298	The Mahomedan University	406
The Handloom Weavers	299	Local Self-Government	407
Silk	301	Presidency Towns	409
Indigo	303	District and Local Boards	410
Tea	304	Progress in Sanitation	414
Coffee	307	Tropical Diseases	421
Oils and Oil Cakes	307	Drug Culture	430
Forests	308	Calcutta Improvement Trust	433
Rubber Cultivation	312	Bombay Improvement Trust	435
Match Factories	312	The Indian Ports	439

	PAGE		PAGE
Boy Scout	445	The Indian Police	562
Palanquin	446	Jails	566
Co-operation in India	449	Executive and Judicial Functions	569
Woman Suffrage	459	The Laws of 1915	571
Opium Traffic	460	Imperial Legislative Council	575
India Tobacco	461	Bombay Legislative Council	588
Work as Medical Service for India	462	Madras Legislative Council	589
Indians Abroad	466	Bengal Legislative Council	591
Indians in Great Britain	470	United Provinces Legislative Council	591
Appointments to the Indian Services	472	Punjab Legislative Council	593
Salary Equivalents	478	Burma Legislative Council	594
The Indian Civil Service	479	Bihar Legislative Council	596
The Indian Medical Service	481	The Public Trustee	597
Pilot Services	485	Freemasonry	599
The Indian National Congress	486	Indian Architecture	601
The Moslem League	490	Archæology	604
The Press	492	Indian Art	607
Indian Press Law	501	Manners and Customs	609
Societies Literary, Scientific and Social	502	Indian Names	611
Table of Wages, Income, etc.	507	Big Game Hunting	613
Principal Clubs in India	508	Routes between India and Europe	614
The Church in India	510	The Suez Canal	618
Roman Catholic Church	514	Travel in India	620
Scottish Churches	515	An Indian Glossary	622
Baptist Societies	516	The New Capital	629
Presbyterian Societies	518	Stock Exchanges	634
Congregational Societies	519	Indian Official Reports	635
All-India Missions	520	Customs Tariff	637
Methodist Societies	523	Botanical and Zoological Surveys	656
Royal Army Temperance Association	524	Native Passenger Ships	657
Cremation	525	Tidal Constants	658
Warrant of Precedence	526	Wild Animals and Snakes	659
Salutes	529	India and the War	660
Salaries	531	Wireless Telegraphy	672
Indian Orders	536	Sport in India	673
The Star of India	536	Chronicle of the Year	682
The Order of the Indian Empire	539	Interest Table	694
Order of the Crown of India	545	Exchange Table	695
Kaisar-i-Hind Medal	546	Indian Stamp Duties	699
Indian Names and Titles	551	Calendar	702
Laws and the Administration of Justice	554	Index	704

Maps.

	PAGE
The Indian Empire (Facing Preface)	
Mesopotamia Operations	119
Persian Gulf	122
Anglo-Russian Agreement	128
North-Western Frontiers	132
Baghdad Railway	142
Trans-Persian Railway	144
India and Ceylon	212
Plan of the New Capital	613

1

The war has come home to India in no appreciable degree. Over two hundred thousand troops have been sent to the various theatres of the struggle. The cream of British manhood in the country has been embodied in the Reserve of Officers. A perpetual stream of reinforcements has passed through the ports, principally Bombay and Karachi, a counter-stream of wounded and sick has returned from the front. But India is in some respects a military State. The Army in peace time occupies a much more important place in the work of the administration than it does in the United Kingdom. Consequently the amount of improvisation has been much smaller, the existing machinery has been easily expanded to meet war needs undreamt of. The disturbance in the social life of the community has been slight. Trade has been good. The rise in the prices of the principal commodities has been small. Money has been plentiful and reasonably cheap. Bankers have complained of a plethora of funds. Not once has the mail steamer failed to bring its weekly budget of news, nor once has the cable either broken down or been interrupted. Then the fortunes of the land have been in the ascendant. The first year of the war witnessed one of the most bounteous harvests in recent history, and India is an agricultural country. It is still dependent upon the crops. There were many anxious months in 1915 when the erratic character of the monsoon seemed to promise acute scarcity in certain areas in the West and famine in parts of the Punjab. Late rains of almost unprecedented volume, however, saved the situation, the harvest will be good over the greater part of India, and scarcity will be confined to small areas.

4

When however these symptoms appear, we have to consider the size of India and the nature of its government. India is no single homogenous country. It is a continent occupied by people wide as the Loch. Under its empires three hundred and fifteen millions of people, a growing proportion of them are educated in English and imbued with the ideas reflected in English literature. It is inevitable that in such circumstances the seeds of political growth we have imputed should desire to flourish. It was well said by an Indian administrator that in the eyes of a man must be a few mad dogs about the matter for surprise is that they do not run so few.

These features in the Indian ... have
been briefly touched upon ... they
are not understood ...
standings where they are ... They
are the inevitable outcome of India's
history and of the political system
that has been developed ... The
do not ...
mixed ...
corrupt ...
profit ...
far ...
do ...
of India ...
developed ...

The History of India in Outline.

No history of India can be proportionate, and the briefest summary must suffer from the same defect. Even a wholesale acceptance as history of mythology, tradition, and folklore will not make good, though it makes picturesque, the many gaps that exist in the early history of India and, though the labours of modern geographers and archaeologists have been amazingly fruitful, it cannot be expected that these gaps will ever be filled to any appreciable extent. Approximate accuracy in chronology and an outline of dynastic facts are all that the student can look for up to the time of Alexander, though the briefest excursion into the by-ways of history will reveal to him many alluring and mysterious fields for speculation. There are, for example, to this day castles that believe they sprang originally from the loins of a being who landed "from an impossible boat on the shores of a highly improbable sea", and the great epic poems contain plentiful statements equally difficult of reconciliation with modern notions of history as a science. But from the Jataka stories and the Puranas, much valuable information is to be obtained, and, for the benefit of those unable to go to these and other original sources, it has been distilled by a number of writers.

The orthodox Hindu begins the political history of India more than 3000 years before Christ, with the war waged on the banks of the Jumna between the sons of Kuru and the sons of Pandu, but the modern critic prefers to omit several of those remote centuries and to take 600 B. C., or thereabouts, as his starting point. At that time much of the country was covered with forest, but the Aryan races, who had entered India from the north, had established in parts a form of civilization far superior to that of the aboriginal savages, and to this day there survive cities, like Benares founded by those invaders. In like manner the Dravidian invaders from an unknown land, who overran the Deccan and the Southern part of the Peninsula, crushed the aborigines, and, at a much later period, were themselves subdued by the Aryans. Of these two civilizing forces, the Aryan is the better known, and of the Aryan kingdoms the first of which there is authentic record is that of Magadha, or Bihar, on the Ganges. It was in, or near, this powerful kingdom that Jainism and Buddhism had their origin, and the fifth King of Magadha, Bimbisara by name, was the friend and patron of Gautama Buddha. The King mentioned was a contemporary of Darius, autocrat of Persia (521 to 485 B. C.) who annexed the Indus valley and formed from his conquest an Indian satrapy which paid as tribute the equivalent of about one million sterling. Detailed history, however, does not become possible until the invasion of Alexander in 326 B. C.

Alexander the Great.

That great soldier had crossed the Hindu Kush in the previous year and had captured Aornos, on the Upper Indus. In the spring of 326 he crossed the river at Ohind, received the submission of the King of Taxila, and marched against Porus who ruled the fertile country between the rivers Hydaspes (Jhelum) and

Akesines (Chenab). The Macedonian carried all before him, defeating Porus at the battle of the Hydaspes, and crossing the Chenab and Ravi. But at the River Hyphasis (Bias) his weary troops mutinied, and Alexander was forced to turn back and retire to the Jhelum where a fleet to sail down the rivers to the sea was nearly ready. The wonderful story of Alexander's march through Media and Persia to Babylon, and of the voyage of Nearchus up the Persian Gulf is the climax to the narrative of the invasion but is not part of the history of India. Alexander had stayed nineteen months in India and left behind him officers to carry on the Government of the kingdoms he had conquered, but his death at Babylon, in 323, destroyed the fruits of what has to be regarded as nothing but a brilliant raid, and within two years his successors were obliged to leave the Indian provinces, heavily scarred by war but not hell-razed.

The leader of the revolt against Alexander's generals was a young Hindu, Chandragupta, who was an illegitimate member of the Royal Family of Magadha. He dethroned the ruler of that kingdom and became so powerful that he is said to have been able to place 600,000 troops in the field against Seleucus, to whom Babylon had passed on the death of Alexander. This was too formidable an opposition to be faced, and a treaty of peace was concluded between the Syrian and Indian monarchs which left the latter the first paramount Sovereign of India (321 B. C.) with his capital at Patalliputra, the modern Patna and Bankepoore. Of Chandragupta's court and administration a very full account is preserved in the fragments that remain of the history compiled by Megasthenes, the ambassador sent to India by Seleucus. His memorable reign ended in 297 B. C. when he was succeeded by his son Bindusara, who in his turn was succeeded by Asoka (269—231 B. C.) who recorded the events of his reign in numerous inscriptions. This king, in an unusually bloody war, added to his dominions the kingdom of Kalinga (the Northern Orissa) and then becoming a convert to Buddhism, resolved for the future to abstain from conquest by force of arms. The consequences of the conversion of Asoka were amazing. He was not intolerant of other religions, and did not endeavour to force his creed on his "children". But he initiated measures for the propagation of his doctrine with the result that "Buddhism, which had hitherto been a merely local sect in the valley of the Ganges, was transformed into one of the greatest religions of the world—the greatest, probably, if measured by the number of adherents. This is Asoka's claim to be remembered, this it is which makes his reign an epoch, not only in the history of India, but in that of the world." The wording of his edicts reveal him as a great king as well as a great missionary, and it is to be hoped that the excavations now being carried on in the ruins of his palace may throw yet more light on his character and times. On his death the Maurya kingdom fell to pieces. Even during his reign there had been signs of new forces at work on the borderland of India, where the inde-

1103 one of them could boast that he had conquered all the country from the Vindhya to the Himalayas including Delhi already a fortress a hundred years old. The son of this conqueror was Prithwi Raj, the champion of the Hindus against the Mahomedans. With his death in battle (1192) ends the golden age of the new civilization that had been evolved out of chaos, and of the greatness of that age there is a splendid memorial in the temples and forts of the Rajput states and in the two great philosophical systems of Sankaracharya (ninth century) and Ramanuja (twelfth century). The triumph of Hinduism had been achieved, it must be added, at the expense of Buddhism, which survived only in Magadha at the time of the Mahomedan conquest and speedily disappeared there before the new faith.

Mahomedan India

The wave of Mahomedan invaders that eventually swept over the country first touched India, in Sind, less than a hundred years after the death of the Prophet in 632. But the first real contact was in the tenth century when a Turkish slave of a Persian ruler founded a kingdom at Ghazni, between Kabul and Kandahar. A descendant of his, Mahmud (907-1030) made repeated raids into the heart of India, capturing places so far apart as Multan, Kanauj, Gwalior, and Somnath in Kathiawar, but permanently occupying only a part of the Punjab. Enduring Mahomedan rule was not established until the end of the twelfth century, by which time, from the little territory of Ghor, there had arisen one Mahomed Ghorl capable of carving out a kingdom stretching from Peshawar to the Bay of Bengal. Prithwi Raj, the Chauhan ruler of Delhi and Ajmer, made a brave stand against, and once defeated, one of the armies of this ruler, but was himself defeated in the following year. Mahomed Ghorl was murdered at Lahore (1206) and his vast kingdom, which had been governed by satraps, was split up into what were practically independent sovereignties. Of these satraps, Qutb-ud-din, the slave ruler of Delhi and Lahore, was the most famous, and is remembered by the great mosque he built near the modern Delhi. Between his rule and that of the Mughals, which began in 1526, only a few of the many Kings who governed and fought and built beautiful buildings, stand out with distinction. One of these was Ala-ud-din (1296-1316), whose many expeditions to the south much weakened the Hindu Kings, and who proved himself to be a capable administrator. Another was Firoz Shah, of the house of Tughlaq, whose administration was in many respects admirable, but which ended, on his abdication, in confusion. In the reign of his successor, Mahmud (1398-1413), the kingdom of Delhi went to pieces and India was for seven months at the mercy of the Turkish conqueror Taimur. It was the end of the fifteenth century before the kingdom, under Sikandar Lodi, began to recover. His son Ibrahim, still further extended the kingdom that had been recreated, but was defeated by Babar, King of Kabul, at Panipat, near Delhi, in 1526, and there was then established in India the Mughal dynasty.

The Mahomedan dynasties that had ruled in capitals other than Delhi up to this date

were of comparatively unimportance though some great men appeared among them. In Gujarat, for example, Ahmad Shah, the founder of Ahmednagar, showed himself a good ruler and builder as well as a good soldier, though his grandson, Mahmud Shah Begara, was a greater ruler—acquiring fame at sea as well as on land. In the South various Kings of the Bahamani dynasty made names for themselves, especially in the long wars they waged on the new Hindu kingdom that had arisen which had its capital at Vijayanagar. Of importance also was Adil Khan, a Turk, who founded (1496) the Bijapur dynasty of Adil Shahis. It was one of his successors who crushed the Vijayanagar dynasty, and built the great mosque for which Bijapur is famous.

The Mughal Empire

As one draws near to modern times it becomes impossible to present anything like a coherent and consecutive account of the growth of India as a whole. Detached threads in the story have to be picked up one by one and followed to their ending, and although the sixteenth century saw the first European settlements in India, it will be convenient here to continue the narrative of Mahomedan India almost to the end of the Mughal Empire. How Babar gained Delhi has already been told. His son, Humayun, greatly extended his kingdom but was eventually defeated (1540) and driven into exile by Sher Khan, an Afghan of great capabilities, whose short reign ended in 1545. The Sur dynasty thus founded by Sher Khan lasted another ten years when Humayun having snatched Kabul from one of his brothers was strong enough to win back part of his old kingdom. When Humayun died (1556) his eldest son, Akbar, was only 13 years old and was confronted by many rivals. Nor was Akbar well served, but his career of conquest was almost uninterrupted and by 1591 the whole of India North of the Nerbudda had bowed to his authority, and he subsequently entered the Deccan and captured Ahmednagar. This great ruler, who was as remarkable for his religious tolerance as for his military prowess, died in 1605, leaving behind him a record that has been surpassed by few. His son, Jehangir, who married the Persian lady Nur Jahan, ruled until 1627, bequeathing to an admiring posterity some notable buildings—the tomb of his father at Sikandra, part of the palace at Agra, and the palace and fortress of Lahore. His son, Shahjahan, was for many years occupied with wars in the Deccan, but found time to make his court of incredible magnificence and to build the most famous and beautiful of all tombs, the Taj Mahal, as well as the fort, palace and Juma Masjid at Delhi. The quarrels of his sons led to the deposition of Shahjahan by one of them, Aurangzeb, in 1658. This Emperor's rule was one of constant intrigue and fighting in every direction, the most important of his wars being a twenty-five years' struggle against the Marathas of the Deccan who, under the leadership of Sivaji, became a very powerful faction in Indian politics. His bigoted attitude towards Hinduism made Aurangzeb all the more anxious to establish his Empire on a firm basis in the south, but he was unable to hold his many conquests, and on his death (1707) the

strong position in Southern India, which had become independent of Delhi and was divided into three large States—Hyderabad, Tanjore, and Mysore—and a number of petty states under local chieftains. In the affairs of these States Dupleix, when Governor of Pondicherry, had intervened with success, and when Madras was captured by a French squadron, under La Bourdonnais (1746) Dupleix wished to hand it over to the Nawab of Arcot—a deputy of the Nizam's who ruled in the Carnatic. The French, however, kept Madras, repelling an attack by the disappointed Nawab as well as the British attempts to recapture it. The treaty of Aix-la-Chapelle restored Madras to the English. The fighting had shown the Indian powers the value of European troops and this was again shown in the next French war (1750-54) when Clive achieved enduring fame by his capture and subsequent defence of Arcot. This war arose from Dupleix supporting candidates for the disputed successions at Arcot and Hyderabad while the English at Madras put forward their own nominees. One of Dupleix's officers, the Marquis de Bussy, persuaded the Nizam to take into his pay the army which had established his power, and in return the Northern Circars, between Orissa and Madras, was granted to the French. This territory, however, was captured by the English in the seven years' war (1756-63). Dupleix had by then been recalled to France. Lally, who had been sent to drive the English out of India, captured Fort St. David and invested Madras. But the victory which Colonel (Sir Eyre) Coote won at Wandiwash (1760) and the surrender of Pondicherry and Gingee put an end to the French ambitions of Empire in Southern India. Pondicherry passed more than once from the one nation to the other before settling down to its present existence as a French colony in miniature.

Battle of Plassey

While the English were fighting the third French war in the South they became involved in grave difficulties in Bengal, where Siraj-ud-Daula had acceded to power. The headquarters of the English at Calcutta were threatened by that ruler who demanded they should surrender a refugee and should cease building fortifications. They refused and he marched against them with a large army. Some of the English took to their ships and made off down the river, the rest surrendered and were cast into the jail known as the "Black Hole." From this small and stifling room 23 persons, out of 146, came out alive the next day. Clive who was at Madras, immediately sailed for Calcutta with Admiral Watson's squadron, recaptured the town (1757), and, as war with the French had been proclaimed, proceeded to take Chandernagore. The Nawab Siraj-ud-Daula then took the side of the French, and Clive, putting forward Mir Jafar as candidate for the Nawab's throne, marched out with an army consisting of 900 Europeans, 2,000 sepoys and 8 pieces of artillery against the Nawab's host of over 50,000. The result was the historic battle of Plassey (June 23) in which Clive, after hesitating on the course to be pursued, routed the Nawab. Mir Jafar was put on the throne

at Murhiddabad, and the price of this honour was put at £2,310,000 in addition to the grant to the Company of the land round Calcutta now known as the District of the twenty-four Parganas. In the year after Plassey, Clive was appointed Governor of Bengal and in that capacity sent troops against the French in Madras and in person led a force against the Oudh army that was threatening Mir Jafar in each case with success. From 1760 to 1765 Clive was in England. During his absence the Council at Calcutta deposed Mir Jafar and for a price put Mir Kasim in his place. This ruler moved his capital to Monghyr, organized an army, and began to intrigue with the Nawab Wazir of Oudh. He soon found, in a dispute over customs dues, an opportunity of quarrelling with the English and the first shots fired by his followers were the signal for a general rising in Bengal. About 200 Englishmen and a number of sepoys were massacred, but his trained regiments were defeated at Ghoria and Odnyallah and Mir Kasim sought protection from the Nawab of Oudh. But in 1764, after quelling a sepoy mutiny in his own camp by blowing 24 ring-leaders from the guns, Major (Sir Hector) Munro defeated the joint forces of Shah Alam, the Mughal Emperor, and the Nawab of Oudh in the battle of Buxar. In 1765 Clive (now Baron Clive of Plassey) returned as Governor. "Two landmarks stand out in his policy. First, he sought the substance, although not the name, of territorial power, under the fiction of a grant from the Mughal Emperor. Second, he desired to purify the Company's service, by prohibiting illicit gains, and by guaranteeing a reasonable pay from honest sources. In neither respect were his plans carried out by his immediate successors. But our efforts towards a sound administration date from this second Governorship of Clive, as our military supremacy dates from his victory at Plassey." Before Clive left India, in 1767, he had readjusted the divisions of Northern India and had set up a system of Government in Bengal by which the English received the revenues and maintained the army while the criminal jurisdiction was vested in the Nawab. The performance of his second task, the purification of the Company's service, was hotly opposed but carried out. He died in 1774 by his own hand, the House of Commons having in the previous year censured him, though admitting that he did render "great and meritorious services to his country."

Warren Hastings

The dual system of government that Clive had set up proved a failure and Warren Hastings was appointed Governor, in 1772 to carry out the reforms settled by the Court of Directors which were to give them the entire care and administration of the revenues. Thus Hastings had to undertake the administrative organization of India, and, in spite of the factious attitude of Philip Francis, with whom he fought a duel and of other members of his Council, he reorganized the civil service, reformed the system of revenue collection, greatly improved the financial position of the Company, and created courts of justice and some semblance of a police force. From 1772 to 1774 he was Governor of Bengal, and from 1774 to 1775

he was the first Governor-General, nominated under an Act of Parliament passed in the previous year. His financial reforms, and the forced contributions he enacted from the rebellious Chet Singh and the Begum of Oudh, were interpreted in England as acts of oppression and formed, together with his action in the trial of Nuncomar for forgery, the basis of his seven years' trial before the House of Lords, which ended in a verdict of not guilty on all the charges. But there is much more for which his administration is justly famous. The recovery of the Marathas from their defeat at Panipat was the cardinal factor that influenced his policy towards the native states. One frontier was closed against Maratha invasion by the loan of a British brigade to the Nawab Vazir of Oudh, for his war against the Rohillas who were intriguing with the Marathas. In Western India he found himself committed to the two Maratha wars (1775-82) owing to the ambition of the Bombay Government to place its own nominee on the throne of the Peshwa at Poona, and the Bengal troops that he sent over made amends, by the conquest of Gujrat and the capture of Gwalior, for the disgrace of Wadgaon where the Marathas overpowered a Bombay army. In the South—where interference from Madras had already led (1769) to what is known as the first Mysore war, a disastrous campaign against Hyder Ali and the Nizam—he found the Madras Government again in conflict with those two potentates. The Nizam he won over by diplomacy, but against Hyder Ali he had to despatch a Bengal army under Sir Eyre Coote. Hyder Ali died in 1782 and two years later a treaty was made with his son Tipu. It was in these acts of intervention in distant provinces that Hastings showed to best advantage as a great and courageous man, cautious, but swift in action when required. He was succeeded, after an interregnum, by Lord Cornwallis (1780-93) who built on the foundations of civil administration laid by Hastings, by entrusting criminal jurisdiction to Europeans and establishing an Appellate Court of Criminal Judicature at Calcutta. In the Civil Service he separated the functions of the District Collector and Judge and organized the "writers" and "merchants" of the Company into an administrative Civil Service. This system was subsequently extended to Madras and Bombay. Lord Cornwallis is better known for his introduction, on orders from England, of the Permanent Settlement in Bengal (See article on Land Revenue). A third Mysore war was waged during his tenure of office which ended in the submission of Tipu Sultan. Sir John Shore (Lord Teignmouth), an experienced Civil Servant, succeeded Lord Cornwallis, and, in 1793, was followed by Lord Wellesley, the friend of Pitt, whose projects were to change the map of India.

Lord Wellesley's Policy

The French in general, and "the Corsican" in particular, were the enemy most to be dreaded for a few years before Lord Wellesley took up his duties in India, and he formed the scheme of definitively ending French schemes in Asia by placing himself at the head of a great Indian confederacy. He started by obtaining from the Nawab of Oudh the cession of

large tracts of territory in lieu of payments overdue as subsidies for British troops, he then won over the Nizam to the British side, and, after exposing the intrigues of Tipu Sultan with the French, embarked on the fourth Mysore war which ended (1799) in the fall of Seringapatam and the gallant death of Tipu. Part of Mysore, the Carnatic, and Tanjore roughly constituting the Madras Presidency of to-day then passed to British rule. The five Maratha powers—the Peshwa of Poona, the Gaekwar of Baroda, Sindhia of Gwalior, Holkar of Indore and the Raja of Nagpur—had still to be brought into the British net. The Peshwa, after being defeated by Holkar, fled to British territory and signed the Treaty of Bassain which led to the third Maratha war (1802-04) as it was regarded by Sindhia and the Raja of Nagpur as a betrayal of Maratha independence. In this, the most successful of British campaigns in India, Sir Arthur Wellesley (the Duke of Wellington) and General (Lord) Lake carried all before them, the one by his victories at Assaye and Argaum and the other at Aligarh and Laswari. Later operations, such as Colonel Monson's retreat through Central India, were less fortunate. The great acquisitions of territory made under Lord Wellesley proved so expensive that the Court of Directors, becoming impatient, sent out Lord Cornwallis a second time to make peace at any price. He, however, died soon after his arrival in India, and Sir George Barlow carried on the government (1805-7) until the arrival of a stronger ruler, Lord Minto. He managed to keep the peace in India for six years, and to add to British dominions by the conquest of Java and Mauritius. His foreign policy was marked by another new departure, inasmuch as he opened relations with the Punjab, Persia, and Afghanistan, and concluded a treaty with Ranjit Singh, at Lahore, which made that Sikh ruler the loyal ally of the British for life.

The successor of Lord Minto was Lord Moira, who found himself obliged almost at once to declare war on the Gurkhas of Nepal, who had been encroaching on British territory. After initial reverses, the English, under General Ochterlony, were successful and the Treaty of Sagauli (1816) was drawn up which defines British relations with Nepal to the present day. For this success Lord Moira was made Marquis of Hastings. In the same year he made preparations for the last Maratha war (1817-18) which was made necessary by the lawless conduct of the Pindaris, gangs of Pathan or Rohilla origin, whose chief patrons were the rulers of Native States. The large number of 120,000 that he collected for this purpose destroyed the Pindaris, annexed the dominions of the rebellious Peshwa of Poona, protected the Rajput States, made Sindhia enter upon a new treaty, and compelled Holkar to give up part of his territory. Thus Lord Hastings established the British power more firmly than ever, and when he resigned, in 1823, all the Native States outside the Punjab had become parts of the political system and British interests were permanently secured from the Persian Gulf to Singapore. Lord Amherst followed Lord Hastings, and his five years' rule (1823-28) are memorable for the first Burmese war and the capture of Bharatpur. The former opera-

tion was undertaken owing to the insolent demands and raids of the Burmese, and resulted in the Burmese ceding Assam, Aracan, and the coast of Malacca and their claims to the lower provinces. The capture of Bharatpur by Lord Combermere (1826) wiped out the rump which General Lake had received there twenty years earlier. A disputed succession on this occasion led to the British intervention.

Social Reform

A former Governor of Madras, Lord William Bentinck, was the next Governor-General. His epitaph by Macaulay, says "He abolished cruel rites, he effaced humiliating distinctions, he gave liberty to the expression of public opinion." His constant study was to elevate the intellectual and moral character of the nations committed to his charge.

Some of his financial reforms, forced on him from England, and his widening of the gates by which educated Indians could enter the service of the Company, were most unpopular at the time, but were eclipsed by the acts he took for the abolition of *Sati*, or widow burning, and the suppression—with the help of Captain Sleeman—of the professional hereditary assassins known as *Thugs*. In 1832 he annexed Cachar, and, two years later, Coorg. The incompetence of the ruler of Mysore forced him to take that State also under British administration—where it remained until 1881. His rule was marked in other ways by the despatch of the first steamship that made the passage from Bombay to Suez, and by his settlement of the long educational controversy in favour of the advocates of instruction in English and the vernaculars. Lord William Bentinck left India (1835) with his programme of reforms unfinished. The new Charter Act of 1833 had brought to a close the commercial business of the Company and emphasized their position as rulers of an Indian Empire in trust for the Crown. By the whole administration, as well as the legislation of the country, was placed in the hands of the Governor-General in Council, and authority was given to create a Presidency of Agra. Before his retirement Bentinck assumed the statutory title of Governor-General of India (1834), thus marking the progress of consolidation since Warren Hastings in 1774 became the first Governor-General of Fort William. Sir Charles Metcalfe, being senior member of Council, succeeded Lord William Bentinck, and during his short tenure of office carried into execution his predecessor's measure for giving entire liberty to the press.

Afghan Wars

With the appointment of Lord Auckland as Governor-General (1836-42) there began a new era of war and conquest. Before leaving London he announced that he looked with exultation to the prospect of "promoting education and knowledge, and of extending the blessings of good Government and happiness to millions in India" but his administration was almost exclusively comprised in a fatal expedition to Afghanistan, which dragged in its train the annexation of Sind, the Sikh wars, and the inclusion of Baluchistan in the protectorate of India. The first Afghan war was undertaken partly to counter the Russian advance

in Central Asia and partly to place on the throne at Kabul the dethroned ruler Shah Shuja in place of Dost Mahomed. The latter object was easily attained (1839) and for two years Afghanistan remained in the military occupation of the British. In 1841 Sir Alexander Burnes was assassinated in Kabul and Sir William Macnaghten suffered the same fate in an interview with the son of Dost Mahomed. The British commander in Kabul, Gen. Elphinstone, was old and feeble, and after two months' delay he led his army of 1,500 and 12,000 camp followers back towards India in the depth of winter. Between Kabul and Jallalabad the whole force perished either at the hands of the Afghans or from cold, and Dr. Brydon was the only survivor who reached the latter city. Lord Ellenborough succeeded Lord Auckland and was persuaded to send an army of 10,000 men to relieve Jallalabad. One force under Gen. Pollock relieved Jallalabad and marched on Kabul, while Gen. Nott, advancing from Kandahar, captured Ghazni and joined Pollock at Kabul (1842). The bazaar at Kabul was blown up, the prisoners released, and the army returned to India leaving Dost Mahomed to take undisputed possession of his throne. The drama ended with a bombastic proclamation from Lord Ellenborough and the parade through the Punjab of the (spurious) gates of Somnath taken from the tomb of Mahmud of Ghazni.

Sikh Wars

Lord Ellenborough's other wars—the conquest of Sind by Sir Charles Napier and the suppression of an outbreak in Gwalior—were followed by his recall and the appointment of Sir Henry (1st Lord) Hardinge to be Governor-General. A soldier Governor-General was not unacceptable, for it was felt that a trial of strength was imminent between the British and the remaining Hindu power in India, the Sikhs. Ranjit Singh, the founder of the Sikh Kingdom, had died in 1839, loyal to the end to the treaty he had made with Metcalfe thirty years earlier. He left no son capable of ruling, and the *Khalsa*, or central council of the Sikh army, was burning to measure its strength with the British sepoys. The intrigues of two men, Lal Singh and Faj Singh, to obtain the supreme power led to their crossing the Sutlej and invading British territory. Sir Hugh Gough, the Commander-in-Chief, and the Governor-General hurried to the frontier, and within three weeks four pitched battles were fought—at Mudki, Ferozeshah, Aliwal and Sohraon. The Sikhs were driven across the Sutlej and Lahore surrendered to the British, but the province was not annexed. By the terms of peace the infant Duleep Singh was recognized as Rajah, Major Henry Lawrence was appointed Resident, to assist the Sikh Council of Regency, at Lahore, the Jullundur Doab was added to British territory, the Sikh army was limited, and a British force was sent to garrison the Punjab on behalf of the child Rajah. Lord Hardinge returned to England (1848) and was succeeded by Lord Dalhousie, the greatest of Indian proconsuls.

Dalhousie had only been in India a few months when the second Sikh war broke out. In the attack on the Sikh position at Chillianwala the British lost 2,400 officers and men.

besides four guns and the colours of three regiments but before reinforcements could arrive from England, bringing Sir Charles Napier as Commander-in-Chief, Lord Gough had restored his reputation by the victory of Gujrat which absolutely destroyed the Sikh army. As a consequence the Punjab was annexed and became a British province (1849), its pacification being so well carried out, under the two Lawrences that on the out-break of the Mutiny eight years later it remained not only quiet but loyal. In 1852 Lord Dalhousie had again to embark on war, this time in Burma, owing to the ill-treatment of British merchants in Rangoon. The lower valley of the Irawaddy was occupied from Rangoon to Prome and annexed, under the name of Pegu, to those provinces that had been acquired in the first Burmese war. British territories were enlarged in many other directions during Lord Dalhousie's tenure of office. His "doctrine of lapse" by which British rule was substituted for Indian States where continued misrule or the failure of a dynasty made this change possible, came into practice in the cases of Satara, Jhansi, and Nagpur (which last-named State became the Central Provinces) where the rulers died without leaving male heirs. Oudh was annexed on account of its misrule. Dalhousie left many other marks on India. He reformed the administration from top to bottom, founded the Public Works Department, initiated the railways, telegraphs and postal system, and completed the great Ganges canal. He also detached the Government of Bengal from the charge of the Governor-General, and summoned representatives of the local Governments to the deliberations of the Government of India. Finally, in education he laid down the lines of a department of public instruction and initiated more practical measures than those devised by his predecessors. It was his misfortune that the mutiny, which so swiftly followed his resignation, was by many critics in England attributed to his passion for change.

The Sepoy Mutiny

Dalhousie was succeeded by Lord Canning in 1856, and in the following year the sepoys of the Bengal army mutinied and all the valley of the Ganges from Delhi to Patna rose in rebellion. The causes of this convulsion are difficult to estimate, but are probably to be found in the unrest which followed the progress of English civilisation, in the spreading of false rumours that the whole of India was to be subdued, in the confidence the sepoy troops had acquired in themselves under British leadership, and in the ambition of the educated classes to take a greater share in the government of the country. Added to this, there was in the deposed King of Delhi Bahadur Shah, a centre of growing disaffection. Finally there was the story—not devoid of truth—that the cartridges for the new Enfield rifle were greased with fat that rendered them unclean for both Hindus and Mahomedans. And when the mutiny did break out it found the Army without many of its best officers, who were employed in civil work, and the British troops reduced, in spite of Lord Dalhousie's warnings, below the number he considered essential for safety. On May 10

the sepoys at Meerut rose in mutiny, cut down a few Europeans, and, unchecked by the large European garrison, went off to Delhi where next morning the Mahomedans rose. From that centre the mutiny spread through the North-Western Provinces and Oudh into Lower Bengal. Risings in the Punjab were put down by Sir John Lawrence and his subordinates, who armed the Sikhs, and with their help reduced the sepoys, and Lawrence was subsequently able to send a strong body of Sikhs to aid in the siege of Delhi. The native armies of Madras and Bombay remained for the most part true to their colours. In Central India, the contingents of some of the great chiefs joined the rebels, but Hyderabad was kept loyal by the influence of its minister, Sir Salar Jung.

The interest of the war centres round Delhi, Cawnpore and Lucknow, though in other places massacres and fighting occurred. The siege of Delhi began on June 8 when Sir Henry Barnard occupied the Ridge outside the town. Barnard died of cholera early in July, and Thomas Reed, who took his place, was obliged through illness to hand over the command to Archdale Wilson. In August Nicholson arrived with a reinforcement from the Punjab. In the meantime the rebel force in Delhi was constantly added to by the arrival of new bodies of mutineers, attacks were frequent and the losses heavy. Cholera and sunstroke carried off many victims on the Ridge, and when the final assault was made in September the Delhi army could only parade 4,720 infantry, of whom 1,800 were Europeans. The arrival of siege guns made it possible to advance the batteries on September 8, and by the 13th a breach was made. On the following day three columns were led to the assault, a foul day. Over the ruins of the Home and Salkeld Co. Nicholson formed up. By nightfall the Brit 1,200 killed and won foothold in the city followed and Delhi. Nicholson was killed. Bahadur Shah's two sons were shot by Captain Hodson.

Massacre at Cawnpore

At Cawnpore the sepoys mutinied on June 27 and found in Nana Sahib, the heir of the last Peshwa, a willing leader in spite of his former professions of loyalty. There a European force of 240 with six guns had to protect 570 non-combatants, and held out for 22 days, surrendering only on the guarantee of the Nana that they should have a safe conduct as far as Allahabad. They were embarked on 10 boats on the Ganges when fire was opened on them, the men being shot or forced to swim before the eyes of their wives and children, and the women being mutilated and thrown into Cawnpore to which place they were taken. Their bodies were thrown down a well before Havelock, having defeated the rebels, arrived to take the place. In the small garrison held out in the city from July 2 to September 2, the British were added and endured the same hardships. The mutiny was under the command of the British was killed.

not finally delivered until Sir Colin Campbell arrived in November. Fighting continued for 18 months in Oudh which Sir Colin Campbell finally reduced, and in Central India, where Sir Hugh Rose waged a brilliant campaign against the disinherited Rani of Jhansi—who died at the head of her troops—and Tantia Topi.

Transfer to the Crown

With the end of the mutiny there began a new era in India, strikingly marked at the outset by the Act for the Better Government of India (1858) which transferred the entire administration from the Company to the Crown. By that Act India was to be governed by and in the name of, the Sovereign through a Secretary of State assisted by a Council of fifteen members. At the same time the Governor-General received the title of Viceroy. The European troops of the Company, numbering about 24,000 officers and men were greatly resenting the transfer—amalgamated with the Royal service, and the Indian Navy was abolished. On November 1, 1858, the Viceroy announced in Durbar at Allahabad that Queen Victoria had assumed the government of India and proclaimed a policy of justice and religious-tolerance. A principle already enunciated in the Charter Act of 1833 was reinforced, and all, of every race or creed, were to be admitted as far as possible to those offices in the Queen's service for which they might be qualified. The aim of the Government was to be the benefit of all her subjects in India—"In their prosperity will be our strength in their contentment our security, and in their gratitude our best reward." Peace was proclaimed in July 1859, and in the cold weather Lord Canning went on tour in the northern provinces to receive the homage of loyal chiefs and to assure them that the "policy of lapse" was at an end. A number of other important reforms marked the closing years of Canning's Viceroyalty. The India Councils Act (1861) augmented the Governor-General's Council, and the Councils of Madras and Bombay by adding non-official members, European and Indian, for legislative purposes only. By another Act of the same year High Courts of Judicature were constituted. To deal with the increased debt of India, Mr James Wilson was sent from England to be Financial Member of Council, and to him are due the customs system, income tax, license duty and State paper currency. The cares of office had broken down the Viceroy's health. Lady Canning died in 1862 and this hastened his departure for England where he died in June of that year. His successor, Lord Elgin, lived only a few months after his arrival in India, and was succeeded by Sir John (afterwards Lord) Lawrence, the "saviour of the Punjab."

Sir John Lawrence

The chief task that fell to Sir John Lawrence was that of reorganising the Indian military system, and of reconstructing the Indian army. The latter task was carried out on the principle that in the Bengal army the proportion of Europeans to Indians in the infantry and cavalry should be one to two, and in the Madras and Bombay armies one to three; the artillery was to be almost wholly European.

The re-organisation was carried out in spite of financial difficulties and the sad state of Indian revenues with the cost of revenue in India with which India had no direct connection, but operations in Bhutan were still draining money on the army in India while the re-organising process was being carried out. In 1860 a famine—in Orissa (1860) and Punjab (1861) and Upper Hindustan (1862-3) caused a fall in Sir John Lawrence's revenue, and he laid down the principle for the future in Indian history that the power of the Government would be helped especially by a fall in taxation every possible means to be adopted to save a nation. He also created the institution of permanent under collection for the British Government. A commission of the time was to be reported. On 18th July 1861 the Viceroy in Bengal. The other was the commission of the wild animals in the case of a report that too many in the case of the years of prosperity for the Indian country to be destroyed by the American Civil War. The State Ministry had a permanent harm to the trade of India, but was on the other hand far more powerful for the work of splendid buildings in India that city during the Governorship of Sir Philip Frederick. Sir John Lawrence retired in 1869 having passed through every grade of the service from Assistant Magistrate to the Viceroyalty. Lord Mayo, who succeeded him created an Agricultural Department and introduced the system of Provincial Councils thus giving the impulse to local government. He also laid the foundation for the reform of the salt duties thereby enabling his successors to abolish the inter-provincial customs duties. Unhappily his career came to an end by the death of the country by extending communications of every kind were not carried out to the full by him, for he was murdered in the convict settlement of the Andaman Islands. In 1872 Lord Northbrook (Viceroy 1872-3) had to exercise his abilities chiefly in the province of finance. A severe famine which threatened Lower Bengal in 1874 was successfully ward off by the organization of State relief and the importation of rice from Burma. The following year was notable for the deposition of the Galt war of Baroda for misgovernment, and for the tour through India of the Prince of Wales (the late King Edward VII). The visit of the Duke of Edinburgh to India when Lord Mayo was Viceroy had given great pleasure to those with whom he had come in touch, and had established a kind of personal link between India and the Crown. The Prince of Wales's tour aroused unprecedented enthusiasm for and loyalty to the British Raj, and further encouragement was given to the growth of this spirit when, in a durbar of great magnificence held on January 1st 1877, on the famous Ridge at Delhi, Queen Victoria was proclaimed Empress of India. The Viceroy of that time, Lord Lytton, had, however, to deal with a situation of unusual difficulty. Two successive years of drought produced, in 1877-78, the worst famine India had known. The most strenuous exertions were made to mitigate its effects, and eight crores of rupees were spent in importing grain, but the loss of life was estimated at 5½ millions. At this time also Afghan affairs once more became prominent.

and men had been lost. This was in itself a heavy burden on the finances of India, which was increased by the serious and widespread famine of 1896-97 and by the appearance in India of bubonic plague. The methods taken to prevent the spread of that disease led in Bombay, to rioting, and elsewhere to the appearance in the vernacular press of seditious articles which made it necessary to make more stringent the law dealing with such writings.

Lord Curzon's Viceroyalty

With famine and plague Lord Curzon also, who succeeded Lord Linn in 1899, had to deal in 1901 the cycle of bad harvests came to an end, but plague increased, and in 1901 deaths from it were returned at over one million. Of the many problems to which Lord Curzon directed his attention, only a few can be mentioned here. Some indeed claim that his greatest work in India was not to be found in any one department but was in fact the general gearing up of the administration which he achieved by his unceasing energy and personal example of strenuous work. He had at once

to turn his attention to the North-West Frontier. The British garrisons beyond our boundary were gradually withdrawn and replaced by tribal levies, and British forces were concentrated in British territory behind them as a support. An attempt was made to check the arms traffic and work on strategic railways was pushed forward. The fact that in seven years he only spent a quarter of a million upon repressive measures and only found it necessary to institute one blockade (against the Mahsud Waziris) is the justification of this policy of compromise between the Lawrence and Lordward schools of thought. In 1901 the trans-Indus districts of the Punjab were separated from that Province, and together with the political charges of the Malakand, the Khyber, Kurram, Tochi, and Wana were formed into the new North-West Frontier Province, under a Chief Commissioner directly responsible to the Government of India. That year also witnessed the death of Abdur Rahman, the Amir of Afghanistan, and the establishment of an understanding with his successor Habibullah. In 1904 the attitude of the Dalai Lama of Tibet being pro-Russian and anti-British, it became necessary to send an expedition to Lhasa under Colonel (Sir Francis) Younghusband. The Dalai Lama abdicated and a treaty was concluded with his successor.

Lord Curzon as Viceroy

In his first year of office Lord Curzon passed the Act which, in accordance with the recommendations of the Fowler Commission, practically fixed the value of the rupee at 1s 4d, and in 1900 a Gold Reserve fund was created. The educational reforms that marked this Viceroyalty are dealt with elsewhere. Chief among them was the Act of 1904 reorganising the governing bodies of Indian Universities. Under the head of agrarian reform must be mentioned the Punjab Land Alienation Act, designed to free the cultivators of the soil from the clutches of money-lenders, and the institution of Agricultural banks. The efficiency of the Army was increased (Lord Kitchener was Commander-in-Chief) by the re-armament of the Indian Army, the strengthening of the

artillery, and the re-organisation of the transport corps. In his relations with the Legislature Lord Curzon occupied a position as partner in a partnership, and he founded the Imperial Council to provide military education to the sons of rulers of princely states. In 1902 the British Government obtained from the Government of Persia a loan of 2,000,000 Rs. for an annual payment of 2,00,000 Rs. The loan was of Rs. 1,00,00,000 and was claimed in a special bill in 1903. In 1904 Lord Curzon resigned his Indian office and was reappointed to a second term of office. Lord Curzon, Governor of Madras, had been a Viceroy during his first term. The character of his second term was the furtherance of the administrative work of a new Viceroy, Lord Minto. A new reform of the Indian Civil Service was made in 1904. In 1905 Lord Curzon was being unable to accept the post of Lord Kitchener for the re-organisation of relations between the Army and the War Office. The Military Department of the Government was being unable to obtain the support of the Government. He was succeeded by Lord Minto. It was a reform of the Government. Lord Minto succeeded for the first time. He had long been noted for his position in the direction into open rebellion. The rebellion in the outbreak in India was the partition of that province. The cause of the rebellion was seditious writings and speeches of the main attempts at a revolution of the Government of British goods are the exports of the main-spring of the war. The disapproval of antagonism to all the principles upon which Western society especially in a democratic country like England has been built up.

Political Outrages

Outside Bengal attempts to quash the discussion by the ordinary law were fairly successful. But scarcely any province was free from disorder of some kind and though recourse was had to the deportation of persons without process assigned under an Act of 1815, special Act had to be passed to meet the situation, viz. — an Explosives Act, a Prevention of Seditious Meetings Act, and a Criminal Law Amendment Act which provides for a magisterial inquiry in private and a trial before three judges of the High Court without a jury. The need for the reinforcement of the law may be shown by a list of the principal political outrages in India while Lord Minto was Viceroy and subsequent to his departure —

December, 1907 — Attempt to wreck the Lieutenant Governor of Bengal's train at Narainagar.

December, 1907 — Attempt on the life of Mr. B. C. Allen at Goalundo.

March, 1908 — Second attempt to wreck Sir Andrew Fraser's train at Chardernagore.

March, 1908 — Attempts to shoot Mr. Higgins, botham, a missionary, at Kushtia.

April 11th, 1908 — Bomb thrown at the Mayor of Chanderagore.

April 30th, 1908 — Murder of Mrs and Miss Kennedy at Mozafferpore

August, 1908 — Mr Camsie, Mill-manager, severely injured by a bomb on the E B S Railway

August, 1908 — Murder of Narendra Nath Gossain, the approver in the Allpore case, in Allpore Jail

November 6th, 1908 — Attempt on the life of Sir Andrew Fraser at Overtoun Hall

November 9th, 1908 — Murder of Inspector Nundo Lal Banerjee, who arrested Khudiram Bose, in Serpentine Lane, Calcutta

November, 1908 — Sukumar, alleged informer, murdered at Dacca

February 10th, 1908 — Murder of Babu Ashutosh Biswas in the Courtyard at Allpore

June, 1909 — Prio Mohun Chatterji (brother of an approver) stabbed to death at Fatehjangpur

July 1st, 1909 — Assassination of Lieutenant-Colonel Sir William Curzon Wylie, at the Imperial Institute, London

November 13th, 1909 — Bomb explosion near H E Lord Minto's carriage at Ahmedabad

December 21st, 1909 — Assassination of Mr A M T Jackson, I C S, Collector of Nasik

January 24th, 1910 — Murder of Khan Bahadur Shams ul-Alum

February 21st, 1911 — Murder of Head Constable Srish Chakravarty

March 2nd, 1911 — Attempt to murder Mr Cowley, P W D, with a bomb in Calcutta

April 19th, 1911 — Babu Manmohan Dey, witness in Munshiganj bomb case, shot dead at Routhbog

June 17th, 1911 — Murder of Mr Ashe, Collector of Tinnevely

June 18th, 1911 — Murder of Sub-Inspector Raj Kumar Roy at Mymensingh

July 1911 — Sonarang case, Rashun Dewan Duffadar, Amar-Dewan, and Kati Benode Chakravarti shot at Netrapati

September 21st, 1912 — Head Constable Radhifal Roy shot dead at Dacca

December 13th, 1912 — Attempt to assassinate Abdul Rahaman, one of the witnesses for the police in the Midnapore conspiracy case

December 23rd, 1912 — H E Lord Hardinge wounded, and one of his servants killed, by a bomb during the State entry into Delhi

March 27th, 1913 — Attempt to murder Mr Gordon the sub divisional officer, with a bomb at Molvi Bazaar, Sylhet

May 17th, 1913 — Chaprasi in the employ of the Lahore Gymkhana Club killed by a bomb near the Lawrence Gardens, Lahore

September 29th, 1913 — Murder of Head Constable Haripado Deb, College Square, Calcutta

September 30th, 1913 — Bankim Chandra Chowdhury, Inspector of Police at Mymensingh, formerly of Dacca, killed by a bomb

January 19th, 1914 — Nripendra Nath Ghose, Inspector of the Calcutta C I D, shot dead on the Chitpur Road, Calcutta. A Bell boy, named Anand, was also shot dead

November 27th 1914 — Seven persons convicted to Ferozapore S. S. for shooting dead

Sub Inspector Bishrat Ali and Zemindar Jowala Singh

February 28th, 1915 — Police Inspector Suresh Chandra Mukerji who had been engaged in connexion with taxi-cab dacoities in Calcutta, shot dead while on duty by four men with revolvers. His orderly was wounded. The assassins escaped

August 25th, 1915 — Commissioner of Danuhatti shot dead. A police constable seriously injured by several revolver shots fired from a Motor Car in an outrage near Calcutta

October 9th, 1915 — Jatindra Mohun Ghose, Deputy Superintendent of Police and his son shot dead at Mymensingh

October 22nd, 1915 — Sub-Inspector Girindra Nath Banerjee killed and another officer wounded in an attempt on the lives of four C I D officers in Calcutta

The list, it will be seen, includes two attempts on the life of the Viceroy himself. It does not include a number of equally significant disturbances, such as the riots in Bombay (June 1908), during the trial of *Tilak*, which led to considerable loss of life. Concurrently with these repressive measures steps were taken to extend representative institutions. In 1907 a Hindu and a Mahomedan were appointed to the Secretary of State's Council, and in 1909 a Hindu was appointed for the first time to the Viceroy's Council. The Indian Councils Act of 1909 carried this policy farther by reconstituting the legislative councils and conferring upon them wider powers of discussion. The executive councils of Madras and Bombay were enlarged by the addition of an Indian member

Lord Minto

As regards foreign policy, Lord Minto's Viceroyalty was distinguished by the conclusion (1907) between Great Britain and Russia of an agreement on questions likely to disturb the friendly relations of the two countries in Asia generally, and in Persia, Afghanistan and Tibet in particular. Two expeditions had to be undertaken on the North-West frontier, against the Zakka Khels and the Mohmands, and ships of the East Indies Squadron were frequently engaged off Maskat and in the Persian Gulf in operations designed to check the traffic in arms through Persia and Mikan to the frontier of India. Towards Native States Lord Minto adopted a policy of less interference than that followed by his predecessor. He invited their views on sedition, and, in a speech at Udaipur, disclaimed any desire to force a uniform system of administration in Native States, and said he preferred their development with due regard to treaties and local conditions. Lord Minto left India in November, 1910 a few weeks after Lord Morley had resigned the Secretaryship of State, the tenure of their respective posts having been practically identical in point of time. The position of the Viceroy had in those years materially changed. Lord Minto had a weak Council, and this weakness was reflected in the government of Bengal and Madras. But it is more important to note that Lord Morley had extended the policy of transferring the actual government of India from India to London, to such an extent that the latter

Secretary for India was able to describe the Viceroy as merely the agent of the Secretary of State

Visit of the King and Queen

Sir Charles (Lord) Hardinge was appointed to succeed Lord Minto. His first year in India was marked by a weak monsoon and famine in parts of Western India still more by the visit to India of the King Emperor and the Queen, who arrived at Bombay on December 2, 1911. From there they proceeded to Delhi where, in the most magnificent durbar ever held in India, the coronation was proclaimed and various boons, including an annual grant of 50 lakhs for popular education were announced. At the same ceremony His Majesty announced the transfer of the capital of India from Calcutta to Delhi, the reunion of the two Bengals under a Governor in Council, the formation of a new Lieutenant-Governorship for Behar, Chota Nagpur, and Orissa and the restoration of Assam to the charge of a Chief Commissioner. On December 14 a review of 60,000 British and Indian troops was held and on the 15th Their Majesties each laid a foundation stone of the new capital. From Delhi they went to Nepal, and the Queen to Agra and Rajputana, afterwards meeting at Lucknow and going to Calcutta. Thence they returned to Bombay and sailed for England on January 10. "From all sources public and private," wrote His Majesty to the Premier, "I gather that my highest hopes have been realised. Our satisfaction will be still greater if time proves that our visit has contributed to the lasting good of India and of the Empire at large."

In March, 1912, a committee of experts was appointed to advise the Government of India as to the site of the new capital. Temporary buildings were erected to accommodate the Government, and on December 23 the State entry into Delhi was made by the Viceroy. This ceremony was marred by an attempt on His Excellency's life as he passed down the Chandni Chauk. The bomb thrown from a house killed an attendant behind the Howdah in which the Viceroy was sitting, seriously wounded Lord Hardinge, but left Lady Hardinge unscathed. The courage displayed by Their Excellencies was unsurpassed and elicited the admiration of all, but, in spite of the offer of large rewards, the assassin was not caught.

Educational schemes claimed a large place in public attention during 1912 and 1913. In the former year a Royal Commission, under the presidency of Lord Islington, was appointed to inquire into the public services of India. In 1912 also a Committee of four was appointed, under the Chairmanship of Field Marshal Lord Nicholson, to inquire into military policy and expenditure in India. In the following year a Royal Commission was appointed under the Chairmanship of Mr Austen Chamberlain, to investigate and report on certain administrative questions relating to Indian finance and currency which had for some years been much discussed particularly in India.

In the North-East of India an expedition, under Gen Bower, was despatched against the Abors for the punishment of the murderers of Mr Noel Williamson

[illegible][illegible]

In the last part of 1917, the attitude of the Government of India towards the Indian National Congress was marked by a change of policy. The Government of India, in the person of the then Secretary of State for India, Lord Curzon, had been in India for some time, and he had been able to establish a personal relationship with the Indian National Congress. This relationship was based on a mutual understanding of the interests of both sides. The Government of India had been able to secure the cooperation of the Indian National Congress in the administration of the country, and the Indian National Congress had been able to secure the support of the Government of India in its efforts to secure the independence of India. This relationship was a significant factor in the development of the Indian National Congress, and it was a factor in the success of the Indian National Congress in its efforts to secure the independence of India.

In July the death of Lady Hardinge, wife of the Viceroy, took place in London after an operation. The courage she had displayed at Delhi when the Viceroy was wounded by a bomb and the sympathetic and active interest she had displayed in the women and children of India, had endeared her to all classes. Her death was widely mourned, and her memory is to be perpetuated by a memorial originated by the Aga Khan.

Effects of the War

The various effects of the European war upon India are fully discussed elsewhere. But it must here be set on record that the declaration of war was followed in India by an unprecedented declaration of loyalty on all sides and the numerous offers of help or personal service made by the Chiefs and peoples aroused in England a feeling of intense gratitude. A military force numbering some 200,000, was sent from India to Europe and East Africa within a short time of the outbreak of hostilities. The announcement of the fact was made on the same day that a message from the King-Emperor was published in it His Imperial Majesty said — "Amongst the many incidents that have marked the

Functiōns of Government.

The functions of the Government of India are perhaps the most extensive of any of the administrative bodies in the world. It also occupies the produce of the land held in the Punjab and Bombay. It has responsibility for all rights of land from a multitude of independent States. It undertakes the management of land in States where the population is dense. In this it is far from a purely administrative body and often rendered more so by a great deal of money. A number of important cities are the principal responsibility of the Government. It owns the bulk of the railways of the country and directly or indirectly controls the production of the most important articles of life. It owns and controls the principal telegraph systems of the country and the postal system and the main means of inland navigation. It had more to do with the land boards and agricultural and other activities connected with the life of the State. It controls the sale of liquor and tobacco and the sale of opium. It is responsible for the education, medical and sanitary operations and the public works of the principal character. The Government has developed relations with the Native States which occupy more than one third of the whole area of India and comprise more than one fifth of its population. The distribution of the great functions between the Government of India and the provincial administrations is a steadily speaking it may be said that the tendency of the day is to continue the Government of India to control and the local governments to administer.

Division of Responsibilities

The collapse of Government in India consequent on the decay of Mughul power and the intrigues of the French on the East Coast forced the officers of the Company to assume territorial responsibility in spite of their own desires and the insistent orders of the Director. Step by step the Company became first the dominant, then the paramount power in India. In these changed circumstances the system of government by mutually independent and unwieldy councils of the merchants at the Presidency towns gave rise to grave abuses. Parliament intervened, and under the Regulating Act of 1773, a Governor-General and four councillors were appointed to administer the Presidency of Fort William (Bengal), and the supremacy of that Presidency over Madras and Bombay was for the first time established. The subordinate Presidencies were forbidden to wage war or make treaties without the previous consent of the Governor-General of Bengal in Council, except in cases of imminent necessity. Pitt's Act of 1784, which established the Board of Control in England, vested the administration of each of the three Presidencies in a Governor and three councillors, including the Commander-in-Chief of the Presidency Army. The control of the Governor-General-in-Council was somewhat extended, as it was again by the Charter Act of 1793. Under the Charter Act of 1833 the Company was compelled to close its commercial business, and it became a political and administrative body holding its territories in trust for the Crown. The same Act vested the direction of the entire civil and military administration and sole power of legislation in the Governor-General-in-Council, and defined more clearly the nature and extent of the control to be extended over the subordinate governments. After the Mutiny, there was passed, in 1858, an Act transferring the Government of India from the Company to the Crown. This Act made no important change in the administration in India, but the Governor-General, as representing the Crown, became known as the Viceroy. The Governor-General is the sole representative of the Crown in India, he is assisted by a Council, composed of high officials, each of whom is responsible for a special department of the administration.

The Government of India exercises in its own hands all matters relating to foreign relations, defence, general taxation, currency, debt, tariffs, ports, telegraphs and railways. The ordinary internal administration—the assessment and collection of revenue, education, medical and sanitary arrangements and irrigation, buildings and roads, fall within the purview of the Local Governments. In all these matters the Government of India exercises a general and constant control. It prescribes lines of general policy and tests their application from the annual administration reports of the Local Authorities. It directly administers certain Imperial departments, such as Railways, Post Office, Telegraphs, the Survey of India and Geology. It employs a number of inspecting officers for those departments primarily left to Local Governments, including Agriculture, Irrigation, Forests, Medical and Archaeology. It receives, and when necessary modifies, the annual budgets of Local Governments, and every new appointment of importance, and every large addition even to minor establishments has to receive its specific sanction. There also exists a wide field of appeal to the Government of India from officials or private individuals who may feel themselves aggrieved by the action of Local Governments, and outside the Presidencies of Madras, Bombay and Bengal, the approval of the Governor General is necessary to the appointment of some of the most important officers of the provincial administration.

Members of the Government

The Government of India is composed of the following members:—
The Governor-General, who is the head of the Government, and who is appointed by the British Crown for a term of five years. He is assisted by a Council of Ministers, who are appointed by him from among the members of the Indian Civil Service. The Council of Ministers is composed of the following members:—
The Secretary to Government, who is the head of the Secretariat, and who is appointed by the Governor-General. He is assisted by several other officers, who are appointed by him from among the members of the Indian Civil Service. The Secretary to Government is responsible for the day-to-day administration of the Government, and for the preparation of the annual budget. He is also responsible for the management of the public works, and for the maintenance of the law and order. The Secretary to Government is a member of the Council of Ministers, and he is responsible for the execution of the decisions of the Council. The other members of the Council of Ministers are the Secretary to the Education Department, the Secretary to the Public Works Department, the Secretary to the Revenue Department, the Secretary to the Law Department, the Secretary to the Military Department, and the Secretary to the Naval Department. Each of these members is responsible for the administration of his respective department, and for the preparation of the annual budget for his department. The Council of Ministers meets regularly, and it is the duty of each member to attend the meetings and to report on the progress of his department. The Council of Ministers is the highest authority in the Government, and its decisions are final. The Governor-General has the right to veto any decision of the Council, but he is not usually inclined to do so. The Council of Ministers is responsible to the British Crown, and it is the duty of each member to report to the Crown on the progress of his department. The Council of Ministers is also responsible to the Indian people, and it is the duty of each member to report to the people on the progress of his department. The Council of Ministers is the highest authority in the Government, and its decisions are final. The Governor-General has the right to veto any decision of the Council, but he is not usually inclined to do so. The Council of Ministers is responsible to the British Crown, and it is the duty of each member to report to the Crown on the progress of his department. The Council of Ministers is also responsible to the Indian people, and it is the duty of each member to report to the people on the progress of his department.

Business Procedure

The Governor-General is assisted by a Council of Ministers, who are appointed by him from among the members of the Indian Civil Service. The Council of Ministers is composed of the following members:—
The Secretary to Government, who is the head of the Secretariat, and who is appointed by the Governor-General. He is assisted by several other officers, who are appointed by him from among the members of the Indian Civil Service. The Secretary to Government is responsible for the day-to-day administration of the Government, and for the preparation of the annual budget. He is also responsible for the management of the public works, and for the maintenance of the law and order. The Secretary to Government is a member of the Council of Ministers, and he is responsible for the execution of the decisions of the Council. The other members of the Council of Ministers are the Secretary to the Education Department, the Secretary to the Public Works Department, the Secretary to the Revenue Department, the Secretary to the Law Department, the Secretary to the Military Department, and the Secretary to the Naval Department. Each of these members is responsible for the administration of his respective department, and for the preparation of the annual budget for his department. The Council of Ministers meets regularly, and it is the duty of each member to attend the meetings and to report on the progress of his department. The Council of Ministers is the highest authority in the Government, and its decisions are final. The Governor-General has the right to veto any decision of the Council, but he is not usually inclined to do so. The Council of Ministers is responsible to the British Crown, and it is the duty of each member to report to the Crown on the progress of his department. The Council of Ministers is also responsible to the Indian people, and it is the duty of each member to report to the people on the progress of his department.

Minister of State, and has the final say in ordinary departmental matters. For any question of special importance, and any matter in which it is proposed to overrule the views of a Local Government, must ordinarily be referred to the Viceroy. Any matter originating in one department which also affects another must be referred to the latter and in the event of the Departments not being able to agree, the case is referred to the Viceroy. The Members of Council meet periodically as a Cabinet—ordinarily once a week—to discuss questions which the Viceroy desires to put before them, or which a member who has been over-ruled by the Viceroy has asked to be referred to Council. If there is a difference of opinion in the Council the decision of the majority ordinarily prevails, but the Viceroy can overrule a majority if he considers that the matter is of such grave importance as to justify such a step. Each departmental office is in the subordinate charge of a Secretary, whose position corresponds very much to that of a permanent Under-Secretary of State in the United Kingdom, but with the difference—that the Secretary is present at Council meetings, that he attends with the Viceroy usually once a week, and discusses with him all matters of importance arising in his Department, that he has the right of bringing to the Viceroy's special notice any case in which he considers that the Viceroy's concurrence should be obtained to action proposed by the Departmental Member of Council, and that his tenure of office is usually limited to three years. The Secretaries have under them Deputy, Under and Assistant Secretaries, together with the ordinary clerical establishments. The Secretaries and Under-Secretaries are usually members of the Indian Civil Service. The Government of India has no Civil Service of its own as distinct from that of the Provincial Governments and officers serving under the Government of India are borrowed from the Provinces.

Secretary, Board of Examiners, Capt O L Peart, I A
 Officer in Charge of the Records of the Government of India, A F Scholfield, M A (offg)
 Librarian, Imperial Library, Calcutta, J. A Chapman
 Agricultural Adviser and Director of the Agricultural Research Institute, Pusa, B C Coventry, O I E
 Superintendent of Natural History Section of Indian Museum, N Annandale, B A, D Sc
 Curator, Industrial Section of Indian Museum, D Hooper, FCS FLS
 Chief Inspector of Mines G F Adams
 Controller of Printing, Stationery and Stamps, M J Cogswell
 Superintendent of Government Printing, J J Melkle
 Chief Inspector of Explosives Lieut Col C A Muspratt-Williams, R A
 Administrator-General of Bengal H T Hyde
 Director Criminal Intelligence, Sir C R Cleveland, K C I E
 Director-General of Commercial Intelligence, A H Ley
 Director of Statistics, G F Shirras
 Customs and Excise Chemist, R L Jenks
 GOVERNORS-GENERAL OF BENGAL
 WILLIAM IN BENGAL

Name	Assumed charge of office
Warren Hastings	1774
Sir John Macpherson, Bart	1785
Earl Cornwallis, K G (a)	1786
Sir John Shore, Bart (b)	1793
Lieut-General the Hon Sir Alured Clarke, K O B (offg)	1798
The Earl of Mornington, P C (c)	1798
The Marquis Cornwallis, K G (2nd time)	1805
Sir George H Barlow, Bart	1805
Lord Minto, P C (d)	1807
The Earl of Moira, K G, P C (e)	1813
John Adam (offg)	1823
Lord Amherst, P C (f)	1823
William Butterworth Bayley (offg)	1828
Lord William Cavendish Bentinck, G O B, G C H, P C	1828
(a) Created Marquess Cornwallis, 15 Aug., 1792	
(b) Afterwards (by creation) Baron Telgnmouth	
(c) Created Marquess Wellesley, 2 Dec 1799	
(d) Created Earl of Minto, 24 Feb., 1813	
(e) Created Marquess of Hastings, 2 Dec., 1816	
(f) Created Earl Amherst, 2 Dec., 1826	

Name	Assumed charge of office
Lord William Cavendish Bentinck, G C B, G C H, P C	1834
Sir Charles Metcalfe, Bart (a) (offg)	1835
Lord Auckland, G O B, P C (b)	1836
Lord Ellenborough, P C (c)	1842
William Wilberforce Bird (offg)	1844
The Right Hon Sir Henry Hardinge, G C B (d)	1844
The Earl of Dalhousie, P C (e)	1848
Viscount Canning, P C (f)	1850

- (a) Afterwards (by creation) Baron Metcalfe
 (b) Created Earl of Auckland, 21 Dec 1838
 (c) Afterwards (by creation) Earl of Ellenborough
 (d) Created Viscount Hardinge, 2 May, 1846
 (e) Created Marquess of Dalhousie, 25 Aug., 1849
 (f) Afterwards (by creation) Earl Canning

NOTE.—The Governor-General ceased to be the direct Head of the Bengal Government from the 1st May, 1851, when the first Lieutenant-Governor assumed office. On 1st April 1912, Bengal was placed under a separate Governor and the appointments of Lieutenant-Governor was abolished.

VICEROYS AND GOVERNORS-GENERAL OF INDIA

Name	Assumed charge of office
Viscount Canning, P C (a)	1858
The Earl of Elgin and Kincardine, K T, G C B, P C	1862
Major-General Sir Robert Napier, K C B (b) (offg)	1863
Colonel Sir William F Denison, K C B (offg)	1863
The Right Hon Sir John Lawrence, Bart, G O B, K O S I (c)	1864
The Earl of Mayo, K P	1869
John Strachey (d) (offg)	1872
Lord Napier of Merchiston, K T (e) (offg)	1872
Lord Northbrook, P C (f)	1872
Lord Lytton, G O B (g)	1876
The Marquess of Ripon, K G, P C	1880
The Earl of Dufferin, K T, G C B, G C M G, P C (h)	1884
The Marquess of Lansdowne, G C M G	1888
The Earl of Elgin and Kincardine, P C	1894
Baron Curzon of Kedleston P C	1899
Baron Ampthill (offg)	1904
Baron Curzon of Kedleston, P C	1904
The Earl of Minto, K G, P C G C M G	1905
Baron Hardinge of Penshurst, P C, G O B, G C M G, G O V O, I S O (i)	1910
(a) Created Earl Canning, 21 May, 1859	
(b) Afterwards (by creation) Baron Napier (of Magdala)	
(c) Afterwards (by creation) Baron Lawrence	
(d) Afterwards Sir John Strachey, G O S I, O I E	
(e) Afterwards (by creation) Baron Napier of Ettrick	
(f) Afterwards (by creation) Earl of Northbrook	
(g) Created Earl of Lytton, 28 April, 1880	
(h) Created Marquis of Dufferin and Ava, 12 Nov 1888	
(i) During tenure of office, the Viceroy is Grand Master and First and Principal Knight of the two Indian Orders (G M S I, and G M I E). On quitting office, he becomes G O S I and G O I E, with the date of his assumption of the Vicerealty	

Control over Legislation

The legislative powers of the Imperial Legislative Council are still regulated by the Act of 1861. Certain Acts of Parliament under which the Government of India is constituted cannot be touched and no law can be made affecting the authority of Parliament or allegiance to the Crown. With these exceptions the legislative powers of the Governor-General-in-Council over the whole of the British India are unrestricted. Measures affecting the public debt, or the revenues of India, the religion of any of His Majesty's subjects, the discipline or maintenance of the military or naval forces, and the relations of the Government with foreign states cannot be introduced by any member without the previous sanction of the Governor-General. Every Act requires the

Governor-General's assent. The assent of the Crown is not necessary to the validity of an Act, but the Crown can disallow any Act that has been passed.

Apart from these legislative powers the Governor-General-in-Council is authorized to make, without calling in the Additional Members, regulations having the force of law for the less advanced parts of the country, where a system of administration simpler than that in force elsewhere is desirable. In cases of emergency the Governor-General can, on his own authority and without reference to his Council, make Ordinances which have the force of law for six months.

All Members of the Imperial and Provincial Legislative Councils are entitled to the prefix "Honble Mr." during their term of office.

A—Elected Members

(Not to be less than 27)

Serial No	Name	Date of commencement of office	Date of expiry of term of office	Electorate
1	Nawab Saiyid Muhammad Sahib Bahadur	11-1-13	10-1-16	Non-official Member, Madras
2	Mr Chakravarti Vijaraghavachariar	Do	Do	Do
3	Sir Ibrahim Rahimtoola, Kt., C.I.E.	Do	Do	Bombay
4	Mr Chimanlal Harilal Setalvad	Do	Do	Do
5	Babu Surendra Nath Banerji	15-2-13	14-2-16	Bengal
6	Maharaja Ranajit Sinha of Nashipur	Do	Do	Do
7	Pandit Bishan Narayan Dar	18-9-14	21-1-16	United Provinces
8	Pandit Madan Mohan Malaviya	22-1-1	Do	Do
9	Khan Bahadur Mian Muhammad Shadi	11-1-13	10-1-16	Punjab
10	Maung Myé	28-12-12	27-12-15	Burma
11	Mr Madhu Sudan Das, C.I.E.	23-1-13	24-1-16	Bihar and Orissa
12	Sriyat Ghanasvami Barua	11-1-13	10-1-16	Assam
13	Mr M. B. Dadabhai	22-1-14	Do	District Councils and Municipal Committees, Central Provinces
14	Rama Rayaningar Venkataranga Bahadur of Panagallu	18-1-13	17-1-16	Landholders, Madras
15	Meherban Sardar Khan Bahadur Rustomji Jehangirji Vakil of Ahmedabad	7-1-13	6-1-16	Do (Sardars of Gujarat)
16	Maharaja Manindra Chandra Nandi of Kasimbazar	22-1-13	21-1-16	Landholders, Bengal
17	Raja Kushalpal Singh, M.A., LL.B., of Kotla	22-2-13	27-12-15	Do (Landholders of Agra)
18	Maharaj-Kumar Gopal Saran Narain Singh of Tikari	28-12-12	27-12-15	Do
19	Sir Gangadhar Madho Chitnavis, K.C.I.E.	11-1-13	10-1-16	Do
20	Khan Bahadur Mir Asad Ali Khan	18-1-13	17-1-16	Muhammadan Community, Madras
21	Sir Fazulbhai Currimbhai Ibrahim, Kt.	11-1-13	10-1-16	Do
22	Mr Abdul Karim Abu Ahmed Ghuznavi	22-1-13	21-1-16	Do
23	Raja Sir Muhammad Ali Muhammad Khan, K.C.I.E., Khan Bahadur, of Mahmudabad	18-1-13	17-1-16	Do
24	Mr Qumrul Huda, Bar-at-Law	11-1-13	10-1-16	Do
25	F. H. Stewart, C.I.E.	6-6-14	27-12-15	Bengal Chamber of Commerce
26	Mr T. W. Birkett	4-4-14	Do	Bombay Chamber of Commerce
27	Raja Saiyid Abu Jafar of Pirpur	18-1-13	17-1-16	Muhammadan Landholders, United Provinces

The Imperial Legislative Council

B—Nominated Members

(Not exceeding 13)

Name	Date of Commencement of office	Date of expiry of term of office	Province or body represented
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(A) OFFICIAL MEMBERS

1. Mr. J. P. Wilson
2. Mr. W. H. C. ...
3. Mr. W. H. C. ...
4. Mr. H. ...
5. Mr. J. ...
6. Mr. G. ...
7. Mr. C. ...
8. Mr. T. ...
9. Mr. H. ...
10. Mr. H. ...
11. Mr. H. ...
12. Mr. J. ...
13. Mr. G. ...
14. Mr. C. ...
15. Mr. A. ...
16. Mr. P. ...
17. Mr. C. ...
18. Mr. P. ...
19. Mr. A. ...
20. Mr. C. ...
21. Mr. C. ...
22. Mr. C. ...

(C) NON OFFICIAL MEMBERS

1. P. S. ...
2. M. ...
3. H. ...
4. Mr. J. H. ...

Present Constitution of the Council

I—The whole Council
 II—The Additional Members
 III—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 IV—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 V—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 VI—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 VII—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 VIII—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 IX—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 X—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XI—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XII—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XIII—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XIV—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XV—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XVI—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XVII—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XVIII—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XIX—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XX—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XXI—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XXII—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XXIII—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XXIV—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XXV—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XXVI—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XXVII—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XXVIII—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XXIX—The Lieutenant-Governor or Chief Commissioner of the Province (1)
 XXX—The Lieutenant-Governor or Chief Commissioner of the Province (1)

Non Officials (2)—

- (a) Elected Members
- (b) Nominated Members

Official majority, exclusive of the Governor General
 The Indian Councils Act, 1891, section 10, provides that not less than one half of the Additional Members (exclusive of the Lieutenant-Governor or Chief Commissioner of the Province) shall be non-officials.

(Present number of Additional Members) { Officials (nominated)
 { Non-officials (elected and nominated)
 { Vacancies

(For work of Imperial Legislative Council, Session 191

7	
1	
27	
35	
27	
5	
32	
3	
60	

The Home Government.

The Home Government of India represents the gradual evolution of the governing board of the old East India Company. The affairs of the Company were originally managed by the Court of Directors and the General Court of Proprietors. In 1784 Parliament established a Board of Control, with full power and authority to control and direct all operations and concerns relating to the civil and military government, and revenues of India. By degrees the number of the Board was reduced and its powers were exercised by the President, the lineal precursor of the Secretary of State for India. With modifications this system lasted until 1858, when the Mutiny, followed by the assumption of the Government of India by the Crown, demanded a complete change. Under the Act of 1858 (now merged in the consolidating measure passed in 1915) the Secretary of State is the constitutional adviser of the Crown on all matters relating to India. He inherits generally all the powers and duties which were formerly vested either in the Board of Control, or in the Company, the Directors and the Secret Committee in respect of the Government and revenues of India. He has the power of giving orders to every officer in India, including the Governor-General, and is in charge of all business relating to India which is transacted in the United Kingdom.

Secretary of State's Powers

Of these wide powers and duties many rest on his personal responsibility, others can be performed only in consultation with his Council, and for some of these the concurrence of a majority of the members of his Council is required. The Secretary of State may act without consulting the Council in all matters where he is not expressly required by statute to act as "Secretary of State in Council." Appointments by the Crown are made on his advice. Every official communication proposed to be sent to India must be laid before Council, unless it falls under either of two reserved classes. One of these is "Secret communications" dealing chiefly with war and peace, relations with foreign Powers and Native States. The others are those which he may deem "urgent." No matter for which the concurrence of a majority of Council is necessary can be treated as either "secret" or "urgent." In ordinary business, for which the concurrence of a majority of Council is not required, the Secretary of State is not bound to follow the advice of the Council. These provisions reserve to the Secretary of State a wide discretionary power of interference with the Government of India which is exercised in accordance with the temperament of the Secretary of State for the time being. But in all matters of finance, the authority is that of the Secretary of State and the Council and is freely exercised.

The Council

The Council of India originally consisted of fifteen members appointed by the Secretary of State. By an Act passed in 1907 it now consists of such number of members, not being less than ten & more than fourteen, as the Secretary of State may from time to time determine. The members hold office for seven

years, and this term may, for special reasons of public advantage, which must be laid before Parliament, be extended for five years more. Nine members must be persons who have served or resided in India for at least ten years, and who have not left India more than five years before their appointment. Several of them have usually belonged to the Indian Civil Service, and have been lieutenant-governors of provinces or members of the Viceroy's Executive Council, others are soldiers, educationists, bankers, or men of diplomatic, official or mercantile experience. The object aimed at in the constitution of the Council is to give the Secretary of State, who has little knowledge of the details of the Indian administration, the help of a body of experts. In 1907, in connection with the policy of constitutional reform, two Indians, one a Hindu and the other a Mahomedan, were appointed to vacancies in the Council. This practice is certainly to be maintained. The present Indian members are a Mahomedan and a Sikh.

The India Office

Associated with the Secretary of State and the India Council is a secretariat known as the India Office, housed at Whitehall. The Secretary of State has two Under Secretaries, one permanent, the other parliamentary, to whom some of his minor duties are delegated. Appointments to the establishment are made by the Secretary of State in Council, but "junior situations" must be filled in accordance with the general regulations governing admission to the Home Civil Service.

The whole cost of the India Office is borne by the revenues of India, though the Home Government makes certain grants and remissions in lieu of a direct contribution amounting to £50,000 a year. The total net cost, including pensions is about £250,000 per annum.

Secretary of State

The Right Hon. Austen Chamberlain, M.P.

Under Secretaries of State

Sir Thomas W. Holderness, K.C.B., K.C.S.I.
The Right Hon. Lord Islington, G.C.B., D.S.O.

Assistant Under Secretary of State

Sir Lionel Abrahams, K.C.B.

Council

Vice-President, Sir Steyning William Edgerley, K.C.V.O., C.I.E.
Sir Felix O. Schuster, Bart.
Sir Theodore Morison, K.C.I.E.
Gen. Sir Charles C. Egerton, G.C.B., D.S.O.
Abbas Ali Balg, C.S.I., LL.D.
Laurence Currie.
Sir William Duke, K.C.S.I., K.C.I.E.
Sirdar Daljit Singh, C.S.I.
Sir Charles Arnold-White.
Sir Murray Hamrick, K.C.S.I., C.I.E.
Sir Charles S. Bayley, G.C.I.E., K.C.S.I., I.S.O.
Clerk of the Council, Sir Lionel Abrahams, K.C.B.
Deputy Clerk of the Council, James H. Seabrooke, C.I.E.

Private Secretary to the Secretary of State, Francis H Lucas, C.B.

Assistant Private Secretary J. C. Walton

Political A.-D.-C. to the Secretary of State, Lieut. Col. Sir J. R. Dunsop Smith, K.C.S.I., C.I.E.

Private Secretary to Sir T. W. Holderness, C. H. Kisch

Private Secretary to Lord Islington, S. K. Brown

Correspondence Departments

SECRETARIES

Financial F. W. Newmarch, C.S.I., and W. Robinson

Judicial and Public, Malcolm C. C. Seton

Military, Gen. Sir E. G. Barrow, G.C.B., and J. H. S. Brooke, C.I.E.

Political and Secret, Sir F. A. Hirtzel, K.C.B.

Public Works, Hermann A. Haines

Revenue and Statistics, L. J. Ker-How, C.I.

Director-in-Chief of the Indo-European Telegraph, Public Works Department, R. C. Barker, C.I.E.

ACCOUNTANT-GENERAL'S DEPARTMENT

Accountant-General, Walter Badoek, C.S.I., also Director of Funds and Official Agent to Administrators General in India

STORE-DEPARTMENT—INDIA OFFICE BRANCH—Director-General, George H. Collier

INDIA STORE DEPOT—Belvedere Road, Lambeth, S. E., Superintendent of the India Store Depot, Captain G. T. Wingfield, R. N.

REGISTRY AND RECORD DEPARTMENT—Registrar and Superintendent of Records, W. Foster, C.I.E.

Miscellaneous Appointments

Government Director of Railway Companies, Sir H. P. Lurt, K.C.I.E.

Librarian, Fredk. W. Thomas, M.A., Hon. Ph. D. (Munich)

Secretary for Indian Students, C. E. Mallet

Educational Adviser to Indian Students, T. W. Arnold, C.I.E., Litt. D., M.A. (21, Cromwell Road, S. W.)

Medical Board for the Examination of Officers of the Indian Services—President, Surg.-Gen. Lieut.-Col. Sir R. H. Charles, G.C.V.O., M.D., F.R.C.S. (retd.), Member, Lt.-Col. J. Anderson, M.B., F.R.S. (retd.)

Legal Adviser and Solicitor to Secretary of State, Sir S. G. Sale, K.C.I.E.

Inspector of Military Equipment and Clothing, Major-Gen. Sir John Stevens, K.C.B.

Surveyor and Clerk of the Works, T. H. Winn, A.R.I.B.A.

Ordnance Consulting Officer, Lieut.-Col. M. S. C. Campbell, C.I.E., R.A.

Officers of the Indian Army attached to the General Staff, War Office, Lieut.-Col. A. G. Stuart, Lt.-Col. M. R. Vaughan, Major C. L. Storr, Capt. Sir G. Duff Sutherland, Dunbar, Bart.

Officers of the Indian Army attached to the India Office—Colonels C. H. Selwyn, A. P. Harris, Lieut.-Col. J. Strachey, M.A.

Consulting Engineer, Sir A. M. Rendel, K.C.I.E.
Stockbroker, Horace Hubert Scott
Auditor, H. A. Cooper

INDIAN TROOP SERVICE—The business of the Troop Service is under the superintendence of Graeme Thompson, Director of Transports at the Admiralty.

Secretaries of State for India

	Assumed charge
Lord Stanley, P.C. (a)	1858
The Right Hon. Sir Charles Wood, Bart. (b)	1859
Earl de Grey and Ripon, P.C. (c)	1866
Viscount Cranborne (d)	1866
The Right Hon. Sir Stafford Northcote, Bart. (e)	1867
The Duke of Argyll, K.T., P.C.	1868
The Marquis of Salisbury, P.C. (2nd time)	1874
The Right Hon. Gathorne Hardy, P.C., created Viscount Cranbrook, 14 May, 1878 (f)	1878
The Marquis of Hartington, P.C. (g)	1880
The Earl of Kimberley, P.C.	1882
Lord Randolph Churchill, P.C.	1885
The Earl of Kimberley, K.G., P.C. (2nd time)	1886
The Right Hon. Sir Richard Assheton Cross, G.C.B., P.C. created Viscount Cross, 19 Aug., 1886	1886
The Earl of Kimberley, K.G., P.C. (3rd time)	1892
The Right Hon. H. H. Fowler (h)	1894
Lord George F. Hamilton, P.C.	1895
The Right Hon. St. John Brodrick (i)	1903
The Right Hon. John Morley, O.M. (j)	1905
The Right Hon. The Earl of Crewe, K.G.	1910
The Right Hon. Viscount Morley of Blackburn, O.M.	1911
The Right Hon. The Earl of Crewe, K.G. (k)	1911
The Right Hon. Austen Chamberlain, M.P.	1915
(a) Afterwards (by succession) Earl of Derby	
(b) " (by creation) Viscount Halifax	
(c) " (by creation) Marquess of Ripon	
(d) " (by succession) Marquess of Salisbury	
(e) " (by creation) Earl of Iddesleigh	
(f) " (by creation) Earl Cranbrook	
(g) " (by succession) Duke of Devonshire	
(h) " (by creation) Viscount Wolverhampton, G.C.S.I.	
(i) " (by succession) Viscount Midleton	
(j) " (by creation) Viscount Morley of Blackburn, O.M.	
(k) " (by creation) Marquess of Crewe, K.G.	

India Council Bill.

In July 1913 Lord Crewe, Secretary of State for India, outlined in the House of Lords certain ideas for the reform of the India Council. The purport of these changes was to reduce the number of the Council, and to substitute departments, with certain independent powers, for the Committees which discharge the detailed work of the Council. Nothing more was heard of this scheme until June 1914, when there was published the text of the amending Bill, with an explanatory memorandum thereon.

Text of the Bill

Appended is the full text of the Bill —

1—(1) The Council of India constituted under the Government of India Act, 1858 (which Act as amended by any subsequent enactment is hereinafter referred to as the principal Act) shall consist of such number of members, not less than seven nor more than ten, as the Secretary of State may from time to time determine.

(2) Unless at the time when an appointment is made to fill a vacancy in the Council two at least of the then existing members of the Council were at the time of their appointment domiciled in India, the person appointed to fill the vacancy must be domiciled in India, and unless at such time as aforesaid six at least of the then existing members were at time of their appointment either domiciled in India or were persons who had served or resided in India for at least ten years and had not ceased so to serve or reside more than five years before the date of their appointment, the person appointed to fill the vacancy must be either domiciled in India, or must have served or resided in India for at least ten years and have not ceased so to serve or reside more than five years before the date of his appointment.

The person appointed to fill a vacancy for which a person domiciled in India is alone eligible shall be selected from amongst the persons whose names appear on a list of persons domiciled in India chosen for the purpose by the members (other than official members) of the Legislative Councils of the Governor General, Governors, Lieutenant Governors and Chief Commissioners, in such manner, subject to such conditions and restrictions, and in such number, as may be prescribed by regulations to be made by the Secretary of State in Council, or by directions issued by the Secretary of State thereunder.

(3) The yearly salary to be paid to a member of the Council shall be one thousand two hundred pounds, provided that such members appointed after the commencement of this Act who at the date of their appointment shall be domiciled in India shall be paid an additional yearly allowance of six hundred pounds.

(4) Where the Secretary of State is of opinion that a person possessing special qualification as a financial expert should be appointed to be a member of the Council on special terms, he may, after recording in a minute to be laid before Parliament the special reasons for the appointment and the special terms on which the appointment is to be made, make the appointment, and the person so appointed shall, notwithstanding anything in the principal Act, or this Act, hold office

for such term and on such conditions, and shall in respect thereof be entitled to such salary and to such pension and other rights and privileges (if any) as His Majesty may, by Order in Council, in each case determine.

Provided that not more than one person appointed under this provision shall be a member of the Council at the same time.

2—(1) Notwithstanding anything in section nineteen of the principal Act, it shall not be necessary for an order or communication sent to India or an order in the United Kingdom in relation to the government of India to be signed by a Secretary of State in such cases as the Secretary of State in Council may otherwise direct, but every such order and communication shall purport to be made by the Secretary of State in Council.

(2) For section twenty of the principal Act (which relates to the powers of the Secretary of State to divide the Council into committees, and to regulate the transaction of business in Council) the following section shall be substituted —

It shall be lawful for the Secretary of State in Council to make rules and orders for the transaction of business as regards the powers which under the principal Act are to be exercised by the Secretary of State in Council.

"Provided that any such rule or order, so far as it affects any matter or question in respect of which the concurrence of a majority at a meeting of the Council is required by this Act, shall not be valid unless made with the concurrence of a majority of the members of the Council present at the meeting of Council at which the rule or order is passed."

(3) Such rules and orders as aforesaid may, notwithstanding anything in sections twenty-two, twenty-four, twenty-five, and twenty-six of the principal Act, provide as respects such matters as may be specified in the rules and orders, —

(a) for enabling powers of the Secretary of State in Council to be exercised otherwise than at a meeting of the Council, and, where necessary for that purpose for dispensing with any requirement of the principal Act as to the occurrence of the majority of votes of members of Council,

(b) for dispensing with the necessity of submitting to Council or depositing in the Council Room for the perusal of members, orders and communications proposed to be sent to India or to be made in the United Kingdom by the Secretary of State, and of recording and notifying to members of Council the grounds on which any order or communication to India has been treated as urgent.

(4) At a meeting of the Council the quorum shall be three, and meetings of the Council shall be convened and held when and as the Secretary of State may from time to time direct.

(5) Any document required by the principal Act to be signed by two or more members of the Council, either with or without the counter-signature of the Secretary of State, or one of his Under Secretaries or Assistant Under Secretaries

may be signed in such manner as the rules and orders made by the Secretary of State in Council for the transaction of business in his Council may prescribe, and any such document, if signed in accordance with such rules and orders, shall be as valid as if it had been signed in accordance with the provisions of the principal Act

(6) Section twenty-seven of the principal Act (which enables the Secretary of State to send certain secret orders without communicating them to the members of his Council) shall extend to any order, not being an order in respect of which concurrence of a majority at the meeting of the Council is required by the principal Act, which relates to any question gravely affecting the internal tranquillity of India, or the interests of India in any other country, or the peace or security of any part of His Majesty's Dominions, and which in the opinion of the Secretary of State is of the nature to require secrecy, and it is further declared that the said section shall apply to any order which the Secretary of State may send in reply to a despatch received and dealt with by him under section twenty-eight of the principal Act

(7) All rules and orders made under this section shall be laid before Parliament as soon as may be after they are made, and if an address is presented to His Majesty by either House of Parliament within the next subsequent thirty days on which that House has sat after any such rule or order is laid before it praying that the rule or order may be annulled His Majesty in Council may annul the rule or order, and it shall henceforth be void but without prejudice to the validity of anything previously done thereunder

The Bill Explained

The publication of the Bill was accompanied by a memorandum explaining its provisions in the following terms—

The object of this Bill is to amend the Government of India Act, 1858. The Act of 1858 in transferring the Government of India to the Crown, created the Council of India, defined its powers and those of the Secretary of State and prescribed in great detail the procedure to be followed in the transaction of business

The Act of 1858 has, as regards the numerical strength of the Council and the conditions of office on it, been amended several times. The procedure for the transaction of business is practically unaltered

By the Act of 1858 the strength of the Council was fixed at fifteen members, of whom not less than nine were to be persons who at the time of appointment had served or resided in India for ten years and had not last left India more than ten years. The members were to hold office during good behaviour but were removable upon an address of both Houses of Parliament. Their salary was fixed at £1,200 a year

These provisions have since been altered. The Council now consists of such number of members, not less than ten and not more than fourteen, as the Secretary of State may from time to time determine. Nine members must be persons who at the time of appointment had served or resided in India for ten years, and had not last left India more than five years. The terms of office is limited to seven years but the

Secretary of State may re-appoint a member for a further period of five years. The salary is £1,000 a year. Since 1907 it has been the recognised practice of the Secretary of State to reserve two appointments on the Council for Indians

The procedure for the transaction of business established by the Act of 1858 cannot be varied by rules. The powers of the Secretary of State in Council may be exercised only at meetings of the Council. A Council must be held every week and a quorum of five members is required. In certain matters, however trivial in themselves, the sanction of a majority of votes at a meeting is required. In other matters the Secretary of State may act alone but except in cases where secrecy or urgency can be claimed his proposed order must lie a week on the Council Table before it is sent. The Act contemplates that all business before coming to the Council should be dealt with in Committee, and the Council is divided for this purpose into several Standing Committees

It is proposed by Clause 1 of the Bill to make certain changes in the strength and composition of the Council, and in the emoluments of the members. Also to take power to make rules for simplifying the business procedure of the Council.

With a simplified procedure much of the unimportant work that now occupies the time of the Standing Committees and the Council would be disposed of by the Secretary of State in communication with and with the assistance of individual members. Committees being specially nominated by him when required. A council of ten to fourteen members would then be needlessly large. It is proposed to fix the number at seven to ten, and to return to the rate of salary (£1,200 a year) allowed by the Act of 1858

It is further proposed to convert the present practice of appointing two Indians to the Council into a statutory requirement, to provide that they shall be chosen from names submitted by Indian Legislative Councils, and to grant to them an allowance of £600 a year in addition to salary in view of the expense of residing out of their own country

Provision is also made to enable the Secretary of State to appoint to the Council a financial member on special terms as to salary, pension and tenure of office. The necessity for an exceptional power of this kind has been recognised by the Royal Commission on Indian Currency

Clause 2 of the Bill provides for the simplification of business procedure. It enables the Secretary of State in Council to make rules to modify the procedure prescribed by the Act of 1858. The rules as and when made are to be laid before Parliament. The requirement of a weekly meeting of the Council is also dispensed with and the quorum reduced. The opportunity is taken to enlarge in a way which experience has shown to be desirable the category of cases which may be dealt with by the Secretary of State in his "Secret" Department without informing or consulting his Council.

On the motion of Lord Curzon the Lords rejected the Bill by 96 votes

The Provincial Governments.

British India is divided into eight large provinces and six lesser charges, each of which is termed a Local Government. The eight major provinces are the Presidencies of Madras, Bombay, and Bengal, the Lieutenant-Governorships of the United Provinces, The Punjab, Burma, and Behar, and the Chief Commissionership of the Central Provinces. The minor provinces are Assam, the North West Frontier Province, Baluchistan, Coorg, Ajmere Merwara and the Andaman Islands. The original division of British authority in India was between the Presidencies of Bengal, Madras and Bombay. Bengal afterwards developed into and was separated from the Government of India and then was gradually divided into provinces as the tide of conquest brought under administration areas too large to be controlled by a single authority. The status and area of these provinces have been varied from time to time to meet the changed conditions of the day. The most recent of these changes was the separation of the North West Frontier from the Punjab in 1901, the division of Bengal into two provinces in 1905, and the final adjustment made in accordance with His Majesty the King's announcement at the Durbar of 1911, whereby the newly-created province of Eastern Bengal and Assam disappeared, and Bengal was re-divided into the Presidency of Bengal, the Lieutenant-Governorship of Behar and Orissa, and the Chief Commissionership of Assam, whilst the headquarters of the Government of India were moved from Calcutta to Delhi and the City of Delhi, with an *enclave* of territory surrounding it, was taken under the direct administration of the Government of India. All Local Governments alike are under the superintendence and control of the Governor-General in Council. They must obey orders received from him, and they must communicate to him their own proceedings. But each Local Government is the Executive head of the administration within the province. By custom, all appointments to Local Governments are for a term of five years.

The Three Classes

The three Presidencies occupy a superior position. The Civil administration of each is vested in a Governor-in-Council, appointed by the Crown, and usually drawn from English public life. On certain matters they correspond directly with the Secretary of State, a privilege not possessed by other provincial Governments. The Governors are assisted by a Council composed of three members, two members of the Civil Service and, under the Indian Councils Act of 1909, a fourth member who is usually an Indian. Like the Governor-General they are addressed as Your Excellency, and they are escorted by a Body-guard. The maximum salaries as fixed by Act of Parliament are Rs 1,20,000 for a Governor and Rs. 64,000 for a member of Council.

Lieutenant-Governors are appointed by the Governor-General subject to the approbation of the Crown. They must have served for at least ten years in India. Under the Indian Councils Act power was taken to create executive councils in the Lieutenant-Governorships and this has been applied to Behar where the Lieutenant-Governor is assisted by a Coun-

cil consisting of two members of the Civil Service and one Indian. Lieutenant-Governors are addressed as Your Honour. Their maximum salary, Rs 1,00,000, is fixed by Act of Parliament.

Chief Commissioners stand upon a lower footing, being delegates of the Governor-General in Council. In theory, a Chief Commissioner administers his province on behalf of the Governor-General in Council, who may resume or modify the powers that he has himself conferred. In practice, the powers entrusted to Chief Commissioner of the Central Provinces are as wide as those exercised by a Lieutenant Governor. The salary of a Chief Commissioner is Rs 50,000 but in the case of the Central Provinces this was raised to Rs 62,000 in consideration of the addition of Berar to his Government.

Provincial Councils

The changes made in the constitution and non-legislative functions of the Legislative Councils of Madras and Bombay by the Act of 1909 more than doubled the number of members, election by specially constituted electorates was introduced, and powers were given to members to debate and move resolutions on the provincial financial statements, to move resolutions on matters of general public interest, and to ask supplementary questions. A description of the system in Bombay will show how the scheme works. The Bombay Legislative Council is composed of four *ex-officio* members (the three members of the Executive Council and the Advocate-General) and 44 additional members. Of the additional members, the Governor nominates twenty-three (of whom not more than fourteen may be officials) and 21 are elected. The Government is thus without a majority of officials in the Council. Of the elected members, eight are elected by groups of municipalities and the District Boards, four by Mahomedan electorates, and three by electorates of the land-holding classes. The Bombay University, the Bombay Municipal Corporation, the Bombay Chamber of Commerce, the Karachi Chamber of Commerce, and the Mill-owner's Association, and the Indian Commercial Community, each elect one member. The regulations for the formation of electorates, and as to the qualifications and disqualifications of candidates and voters, are similar to those made in the case of the Supreme Council.

The rules for the discussion of the annual financial statement are similar to those applicable to the Supreme Council. The Financial Statement is presented and considered as a whole and then in detail, and resolutions may be moved. The Government is not bound by any resolutions which the Council may pass. Matters of general public interest under the control of Local Governments may be made the subject of resolutions. Laws passed by these Legislative Councils require the sanction of the Governor-General and may be disallowed by the Crown.

In constitution, in functions, and in the system of special electorates, the Legislative Councils in the Lieutenant-Governorships resemble in all the essential particulars the Legislative Council of Bombay.

The Secretariat

Each Local Government works through a Secretariat, which is divided into various departments, each under a Secretary. In addition to the Secretariat, there are special departmental heads such as the Inspectors General of Police, Jails and Registration, the Director of Public Instruction, the Inspector-General of Civil Hospitals or Surgeon-General, the Sanitary Commissioner and the Superintendent of the Civil Veterinary Department. There are also Chief Engineers for Public Works and Irrigation, who are likewise Secretaries to Government. In nearly all the Provinces except Bombay, the revenue departments are administered under Government, by a Board of Revenue.

The District Officer

The administrative system is based on the repeated sub-division of territory, each administrative area being in the responsible charge of an officer who is subordinate to the officer next in rank above him. The most important of these units is the District, and India embraces more than 250 Districts, with an average area of 4,430 square miles and an average population of 9,81,000. In Madras there is no local officer above the head of the District, where a Commissioner has the supervision of a Division comprising from four to six Districts. The head of a District is styled either the Collector and District Magistrate or the Deputy Commissioner. He is the representative of the Government and embodies the power of the State. He is concerned in the first place with the land and the land revenue. He has also charge of the local administration of the excise, income tax, stamp duty and other sources of revenue. As a Magistrate of the first class, he can imprison for two years and fine up to a thousand rupees. In practice he does not try many criminal cases, although he supervises the work of the other Magistrates in the District.

In addition to these two main departments, the Collector is interested in all matters pertaining to the welfare of the people. In some branches of the administration his functions are, in consequence of the formation of special departments such as those of Public Works, Forests, Jails, Sanitation, and Education less direct than was formerly the case. But even in matters dealt with by separate departments, his active co-operation and direction in counsel are needed. The Municipal Government of all considerable towns is vested in Municipalities but it is the duty of the Collector to guide and control their working. He is usually the Chairman of the District Board which, with the aid of subsidiary boards, maintains roads, schools and dispensaries, and carries out sanitary improvements in rural areas.

Other Officers

Other important district officers are the Superintendent of Police, who is responsible for the discipline and working of the police force and the Civil Surgeon, who (except in Bombay) is the head of the medical and sanitary administration. The local organisation of Government Public Works, Forests, Education and other special departments varies in different parts of the country. Each District has its own law officer, styled the Government Pleader.

The Districts are split up into sub-divisions, under Junior Officers of the Indian Civil Ser-

vise or members of the Provincial Service called Deputy Collectors. In Madras, Bombay and the United Provinces there are smaller sub-district units called taluks or tahsils, administered by tahsildars (Bombay Mahaldars), with naib tahsildars or mahalkarris. The tahsildar is assisted by subordinate officers, styled revenue inspectors or kanungos and the village officers. The most important of the latter are the headman who collects the revenue, the karnam, karkun or patwari who keeps the village accounts, and the chauthdar or village watchman.

Trend of Provincial Government.

The relations of the Provincial administrations with the Government of India form the subject of incessant discussion. On the one side there are the strong centralisers who would focus all authority in the Government of India, on the other those stout advocates of provincial autonomy who would make the Local Governments virtually independent of the Government of India. The trend of Indian policy since the departure of Lord Curzon has been steadily in the direction of increasing the authority of the Provincial Governments and the control and interference of the Government of India has been materially reduced, especially in financial matters. There was a marked development of this policy adumbrated in the despatch of the Government of India which was submitted to the Secretary of State, the proposal to remove the headquarters of the Government of India from Calcutta to Delhi. This paragraph thus indicated the idea of the supreme authorities, although the extreme interpretation placed upon it by some Indian publicists had to be repudiated, it remains the most authoritative exposition of the trend of Indian policy.

The maintenance of British rule in India depends on the ultimate supremacy of the Governor General in Council, and the Indian Councils Act of 1909, itself bears testimony to the impossibility of allowing matters of vital concern to be decided by a majority of non-official votes in the Imperial Legislative Council. Nevertheless it is certain that, in the course of time the just demands of Indians for a larger share in the government of the country will have to be satisfied, and the question will be how this devolution of power can be conceded without impairing the supreme authority of the Governor General in Council. The only possible solution of the difficulty would appear to be gradually to give the Provinces a larger measure of self-government, until at last India would consist of a number of administrations, autonomous in all provincial affairs with the Government of India, above them all, and possessing power to interfere in case of misgovernment, but ordinarily restricting their functions to matters of Imperial concern. In order that this consummation may be attained, it is essential that the supreme Government should not be associated with any particular Provincial Government. The removal of the Government of India from Calcutta is, therefore, a measure which will in our opinion, materially facilitate the growth of Local Self-Government on sound and safe lines. It is generally recognised that the capital of a great central Government should be separate and independent, and effect has been given to this principle in the United States, Canada and Australia."

Administrative Divisions.

Provinces	No of Districts	Area in Square miles	Population (1911)
Ajmer Merwara	2	2,711	501,305
Andamans and Nicobars		7,111	20,450
Assam	12	52,050	6,713,635
Baluchistan	6	15,804	414,112
Bengal	23	78,112	15,481,077
Bihar and Orissa	21	83,205	34,400,034
Bombay (Presidency)	26	123,061	10,672,642
Bombay	26	75,018	16,113,042
Sind	6	17,066	3,513,435
Aden		80	46,165
Burma	41	236,738	12,115,217
Central Provinces and Berar	22	100,145	13,016,303
Coorg	1	1,582	174,970
Madras	24	111,726	41,105,401
North-West Frontier Province (Districts and administered Territories)	5	16,406	2,106,933
Punjab	20	97,209	10,971,056
United Provinces of Agra & Oudh	48	107,161	47,182,044
Agra	36	83,193	14,624,040
Oudh	12	23,966	12,558,004
Total British Territory	267	1,097,001	244,267,512

States and Agencies	No of Districts	Area in Square miles	Population (1911)
Baluchistan States		80,511	390,432
Baroda State		8,000	2,032,793
Bengal States		32,773	4,538,161
Bombay States		65,761	7,411,567
Central India Agency		78,772	9,356,980
Central Provinces States		31,188	2,117,002
Eastern Bengal and Assam States			575,835
Hyderabad State		82,098	13,374,076
Kashmir State		80,900	3,158,133
Madras States		9,969	4,811,841
Cochin State			918,110
Travancore State			3,428,975
Mysore State		29,444	5,806,193
North-West Frontier Province (Agencies and Tribal areas)			1,622,094
Punjab States		36,532	4,212,794
Rajputana Agency		127,541	10,530,432
Sikkim			87,920
United Provinces States		5,979	382,036
Total Native States..		675,267	70,864,995
Grand Total, India..		1,773,168	315,132,537

The Bombay Presidency.

The Bombay Presidency stretches along the west coast of India, from Sind in the North to Kutch in the South. It embraces, with its feudatories and Aden, an area of 186,023 square miles and a population of 27,084,317. Of this total 65,761 square miles are in Native States, with a population of 7,411,675. Geographically included in the Presidency but under the Government of India is the first class Native State of Baroda with an area of 8,182 square miles and a population of 2,032,708. The outlying post of Aden is under the jurisdiction of the Bombay Government. It has an area of 80 square miles and a population of 46,105.

The Presidency embraces a wide diversity of soil, climate and people. In the Presidency Proper are the rich plains of Gujarat, watered by the Nerbudda and the Tapti, whose fertility is so marked that it has long been known as the Garden of India. South of Bombay City the province is divided into two sections by the Western Ghats, a range of hills running parallel to the coast. Above Ghats are the Deccan Districts, with a poor soil and an arid climate, south of these come the Karnatic Districts. On the sea side of the Ghats is the Konkan, a rice-growing tract, intercepted by creeks which make communication difficult. Then in the far north is Sind, totally different from the Presidency Proper, a land of wide and monotonous desert except where irrigation from the Indus has brought abounding fertility.

The People

The population varies as markedly as soil and climate. In Sind Mahomedans predominate. Gujarat has remained true to Hinduism although long under the dominion of powerful Mahomedan kings. Here there is an amplitude of caste divisions, and a people, who although softened by prosperity, are amongst the keenest trading races in the world. The Deccan peasant has been seasoned by adversity, the saying goes that the Deccan expects a famine one year in every three, and gets it, the population is much more homogeneous than in Gujarat, and thirty per cent are Mahattas. The Karnatic is the land of the Lingayets, a Hindu reforming sect of the twelfth century, and in the Konkan there is a large proportion of Christians. Four main languages are spoken, Sindhi, Gujarati, Marathi and Kanarese, with Urdu a rough *lingua franca* where English has not penetrated. The main castes and tribes number five hundred.

Industries

The principal industry is agriculture, which supports sixty-four per cent of the population. In Sind the soils are wholly alluvial, and under the influence of irrigation produce yearly increasing crops of wheat and cotton. In Gujarat they are of two classes, the black cotton soil, which yields the famous Broach cottons, the finest in India, and alluvial which under careful cultivation in Ahmedabad and Kaira makes splendid garden land. The dominant soil characteristic of the Deccan is black soil, which produces cotton, wheat, gram and millets, and in certain tracts rich crops of sugar cane. The Konkan is a rice land, grown under the abundant rains of the submontane regions, and in the south the Dharwar cotton vies with Broach as the best in India. There

are no great perennial rivers suitable for irrigation, and the harvest is largely dependent upon the seasonal rainfall, supplemented by well irrigation. A chain of irrigation works, consisting of canals fed from great reservoirs in the region of unfailing rainfall in the Ghats, is gradually being completed, and this will ultimately make the Deccan immune to serious drought. More than any other part of India the Presidency has been scourged by famine and plague during the past fifteen years. The evils have not been unmixed, for tribulation has made the people more self-reliant, and the rise in the values of all produce, synchronising with a certain development of industry, has induced a considerable rise in the standard of living. The land is held on what is known as the ryotwari tenure, that is to say, each cultivator holds his land direct from Government under a moderate assessment, and as long as he pays this assessment he cannot be dispossessed.

Manufactures

Whilst agriculture is the principal industry, others have no inconsiderable place. The mineral wealth of the Presidency is small, and is confined to building stone, salt extracted from the sea, and a little manganese. But the handicrafts are widely distributed. The handloom weavers produce bright-coloured saris, and to a diminishing extent the exquisite kincobs of Ahmedabad and Surat. Bombay silver ware has a place of its own, as well as the brass work of Poona and Nasik. But the tendency is to submerge the indigenous handicrafts beneath industry organised on modern lines. Bombay is the great centre in India of the textile trade. This is chiefly found in the headquarter city, Bombay, where the industry embraces 3,009,172 spindles and 48,845 looms and employs 109,860 hands and consumes 3,773,133 cwts of cotton. This industry is now flourishing, and is steadily rising in efficiency. In lieu of producing immense quantities of low grade yarn and cloth, chiefly for the China market, the Bombay mills now turn out printed and bleached goods of a quality which improves every year, and the principal market is at home. Whilst the industry centres in Bombay City, there are important offshoots at Ahmedabad, Broach and Sholapur. In Ahmedabad there are 978,610 spindles and 22,705 looms; in Sholapur 235,060 spindles and 3,460 looms, and in the Presidency 47,54,694 spindles and 82,436 looms. It is expected that the prosperity of the Bombay trade will be quickened, as a project, now in operation, for the substitution of electricity for steam—the electricity is generated at a hydro-electric station in the Ghats, fifty miles distant—turnishes cheap and efficient power. Its situation on the western-sea-board, in touch at once with the principal markets of India and the markets of the west, has given Bombay an immense sea-borne trade. The older ports, Surat, Broach, Cambay and Mandvi, were famous in the ancient days, and their bold and hardy mariners carried Indian commerce to the Persian Gulf and the coasts of Africa. But the opening of the Suez Canal and the increasing size of ocean steamers have tended to concentrate it in modern ports with deep water anchor-

ages, and the sea-borne trade of the Presidency is now concentrated at Bombay and Karachi, although attempts are being made to develop Mormugao, in Portuguese territory, into an outlet for the trade of the Southern Mahratta Country. The sea-borne trade of the Bombay Presidency (including Sind) was valued in 1914-15 at Rs 152 crores (imports Rs. 61 crores exports Rs 51 crores, costing Rs 36 crores) That of Sind at Rs 44 crores

Administration

The Presidency is administered by a Governor-in-Council. The Governor is appointed by the Crown, and is usually drawn from the ranks of those who have made their mark in English public life. He is assisted by a Council of three members, two of whom are drawn from the Indian Civil Service, and the third in practice is an Indian. Each Member takes special charge of certain departments, and cases where differences of opinion occur, or of special importance, are decided 'in Council'. All papers relating to public service business reach Government through the Secretariat, divided into five main departments each under a Secretary (a) Revenue and Financial (b) Political, Judicial, and Special (c) General, Educational, Marine and Ecclesiastical (d) Ordinary Public Works (e) Irrigation. The senior of the three Civilian Secretaries is entitled the Chief Secretary. The Government frequently moves. It is in Bombay from November to the end of March, at Mahabaleshwar from April to June, in Poona from June to September, and at Mahabaleshwar from October to November, but the Secretariat is always in Bombay. Under the Governor-in-Council the Presidency is administered by four Commissioners. The Commissioner in Sind has considerable independent powers. In the Presidency Proper there are Commissioners for the Northern Division, with headquarters at Ahmedabad, the Central Division at Poona, and the Southern Division at Belgaum. Each district is under a Collector, usually a Covenanted Civilian, who has under him one or more Civilians as Assistant Collectors, and one or more Deputy Collectors. A collectorate contains on an average from eight to ten talukas, each consisting of from one to two hundred villages whose whole revenues belong to the State. The village officers are the patel, who is the head of the village both for revenue and police purpose, the talati or kulkarni, clerk and accountant, the messenger and the watchman. Over each Taluka or group of village is the mamlatdar, who is also a subordinate magistrate. The charge of the Assistant Deputy Collector contains three or four talukas. The Collector and Magistrate is over the whole District. The Commissioners exercise general control over the Districts in their Divisions. The control of the Government over the Native States of the Presidency is exercised through Political Agents.

Justice

The administration of justice is entrusted to the High Court sitting in Bombay, and comprising a Chief Justice, who is a barrister, and six puisne judges, either Civilians, Barristers, or Indian lawyers. In Sind the Court of the Judicial Commissioner (three

judges, one of whom must be a barrister) is the highest court of civil and criminal appeal. Of the lower civil courts the court of the first instance is that of the Subordinate Judge recruited from the ranks of the local lawyers. The Court of first appeal is that of the District or Assistant Judge, or of a first class subordinate Judge with special powers. District and Assistant Judges are Indian Civilians, or members of the Provincial Service. In cases exceeding Rs 5,000 in value an appeal from the decision of the Subordinate or Assistant Judge and from the decision of the District Judge in all original suits lies to the High Court. District and Assistant Judges exercise criminal jurisdiction throughout the Presidency, but original criminal work is chiefly disposed of by the Executive District Officers. Capital sentences are subject to confirmation by the High Court. In some of the principal cities Special Magistrates exercise summary jurisdiction (Bombay has four Presidency Magistrates, as well as Honorary Magistrates exercising the functions of English Justices of the Peace) and a Court of Small Causes corresponding to the English Country Courts.

Local Government.

Local control over certain branches of the administration is secured by the constitution of local boards and municipalities, the former exercising authority over a District or a Taluka, and the latter over a city or town. These bodies are composed of members either nominated by Government or elected by the people, who are empowered to expend the funds at their disposal on education, sanitation, the construction of roads and tanks, and general improvements. Their funds are derived from cesses on the land revenue, the toll and ferry funds. The tendency of recent years has been to increase the elective and reduce the nominated element, to allow these bodies to elect their own chairmen, whilst large grants have been made from the general revenues for water supply and drainage.

Finance

The finance of the provincial governments is marked by definite steps toward provincial financial autonomy. Up to 1870 there was one common purse for all India. Since then progressive steps have been taken to increase the independence of local Governments. Broadly, certain heads of revenue are divided with the Imperial Government, whilst certain growing heads of revenue, varying in each province, are allotted to the local Government. Thus in Bombay the land revenue, stamp revenue and revenue from assessed taxes are divided with the Government of India. All other local sources of revenue go intact to the local Government. The provincial Budget for 1915-16 shows an opening balance of Rs 154 lakhs, revenue 749 lakhs, expenditure 771 lakhs and the closing balance Rs 131 lakhs. These large balances are due to grants from the Imperial Governments for non-recurring expenditure.

Public Works

The Public Works Department is under the control of two Chief Engineers who act as Secretaries to the Government, one for General Works and the other for Irrigation.

Under them are Superintending Engineers in charge of divisions and Executive Engineers in charge of districts, with the Consulting Architect. The chief irrigation works are in Sind and consist of a chain of canals fed by the annual inundations from the Indus and one perennial canal the Jamrao. In the Presidency proper the principal protective works are the Nera Canal Gohak Canal, Mutha Canal and the Godavari Canal Scheme. In addition there is under construction a chain of protective irrigation works, originating in reservoirs in the Ghat regions. The first of these the Godavari Scheme, is now in operation, the Pravara Scheme and the Nera Scheme have recently been sanctioned. The Public Works budget for the current year is 80 lakhs of rupees.

Police

The Police Force is divided into three categories District Police, Railway Police and the Bombay City Police. The District Police are under the Inspector-General who is either a member of the Gazetted Force or a Covenanted Civilian. Under him are the Deputy Inspector-Generals for Sind and the Northern and Southern Ranges of the Presidency proper, for Railways and for Criminal Investigation. District Superintendents of Police have charge of each District with a regular cadre comprising Assistant Superintendents, Sub-Inspectors, Chief Constables and Constables. The Bombay City Police is a separate force maintained by Government under a Commissioner who is responsible direct to Government. The Training School at Nasik prepares young gazetted officers and the rank and file for their duties. The cost of the Police is 112 lakhs.

Education

Education is imparted partly through direct Government agency, partly through the medium of grants-in-aid. Government maintain Arts Colleges at Bombay, Poona and Gujarat, the Grant Medical College, the Poona College of Science, the Agricultural College, Veterinary College, School of Art, Law School and a College of Commerce. A Science College in Bombay is now in course of construction. Also in Bombay City, and the headquarters of each district, a model secondary school. The other secondary schools are in private hands, the majority of the primary schools are maintained by District and Local Boards with a grant-in-aid. The Bombay Municipality is responsible for primary education in Bombay City. There are now in the Presidency 10 Arts Colleges, 173 High Schools, 14,661 Primary schools, with 1,029,017 scholars. The Government Educational Budget is 76 lakhs.

The Educational Department is administered by a Director with an Inspector in each Division and a Deputy Inspector with Assistant in each district. Higher education is controlled by the Bombay University (established in 1857) consisting of the Chancellor (the Governor of the Presidency), the Vice Chancellor (appointed by Government for two years), and 110 Fellows of whom 10 are *ex-officio*, 10 elected by the Graduates, 10 by the Faculties, and 80 are nominated by the Chancellor.

The principal educational institutions are —
Government Arts Colleges—
 Elphinstone College, Bombay, Principal Wilkinson
 Deccan College, Poona, Principal Mr H G Rawlinson
 Gujarat College, Ahmedabad, Principal Mr Rev W G Robertson

Private Arts Colleges—

St. Xavier's, Bombay (Society of Jesus)
 Principal Rev Father Goodyear
 Wilson College, Bombay (Scottish Mission)
 Principal Rev Dr Mackichan
 Ferguson College, Poona (Deccan Educational Society), Principal the Hon'ble Mr. R. P. Paranjpe
 Baroda College, Baroda (Baroda State)
 Principal Mr Clarke
 Samaldas College, Bhavnagar (Bhavnagar State) Principal Mr Unwalla
 Bahauddinbhai College, Junagadh State, Principal Mr Scott

Special Colleges—

Grant Medical College, Bombay (Government), Principal Lt. Col. Street, M.S.
 College of Science, Poona (Government), Principal Dr Allen
 Agricultural College, Poona (Government), Principal Dr Harold Mann
 Chiefs' College, Rajkot, Principal Mr Mayne
 College of Science, Ahmedabad
 Law School, Bombay, Principal, Mirza Ali Akbar Khan
 College of Commerce, Bombay, Principal, Mr P. Anstey
 Veterinary College, Bombay, Mr K. Hewlett
 Bombay Bacteriological Laboratory, Director: Major Liston, M.S.
 Sir J. J. School of Art, Bombay (Government), Principal Mr Cecil Burns
 Victoria Technical Institute, Bombay, Principal Mr T. Dawson

Medical

The Medical Department is in charge of the Surgeon-General and Sanitation of the Sanitary Commissioner, both members of the Indian Medical Service. Civil Surgeons stationed at each district headquarters are responsible for the medical work of the district, whilst sanitation is entrusted to one of the Deputy Sanitary Commissioners. Three large hospitals are maintained by the Government in Bombay, and well equipped hospitals exist in all important up-country stations. Over four million persons including 67,000 in-patients are treated annually. The Presidency contains 7 Lunatic Asylums and 16 institutions for the treatment of Lepers. Vaccination is carried out by a staff under the direction of the Sanitary Commissioner. Sanitary work has received an immense stimulus from the large grants made by the Government of India out of the opium surpluses.

Governor and President in Council

His Excellency The Right Hon'ble Freeman Freeman-Thomas Baron Willingdon of Rotton, G.C.I.E. Took his seat 5th April 1913

Personal Staff

J. Cremer, I.C.S. J.P., Private Secretary
 Major J. G. Greig, C.I.E., Pioneers, M.S.
 Secretary

Captain Rigby, R.A.M.C., Surgeon to H. F. the Governor

Capt. K. O. Goldie, 10th Duke of Cambridge's Own Lancers (Hodson's Horse), Aide-de-Camp

Captain J. C. R. Gannon, 23rd Cavalry, Extra Aide-de-Camp

Capt. K. O. Goldie, 10th Lancers, Official Commandant, H. E. the Governor's Body Guard

Subedar-Major Sher Muhammad Khan, 121st Pioneers, Indian Aide-de-Camp

Members of Council

Mr W. D. Sheppard, C.I.F., I.C.S.

Mr George Carmichael, C.S.I., I.C.S.

Mr Mahadev Bhaskar Chaulal, C.S.I., F.A.I.B.

Additional Members of Council

Elected

Moulvie Rafiuddin Ahmad, Bar-at-Law, Elected by the Muhammadan Community of the Central Division

Mr D. V. Belvi, B.A., LL.B. Elected by the Municipalities of the Southern Division

Mr G. M. Bhurgri, Bar-at-Law, Elected by the Jaghirdars and Zamindars of Sind

Mr Haji Suleman Abdul Wahed, Elected by the Muhammadan Community of the City of Bombay

Sardar Syed Ali El Edroos, Elected by the Muhammadan Community of the Northern Division

Mr K. R. Godbole, Elected by the District Local Boards of the Central Division

Shahkh G. H. Hidayatallah, LL.B. Elected by the District Local Boards of the Sind Division

Sardar Sir Chinubhai Madhavlal, Bart., C.I.E. Elected by the Millowners' Association of Ahmedabad

Mr Dinsha Edulji Wacha, Elected by the Municipal Corporation of the City of Bombay

Mr G. K. Parekh, B.A., LL.B. Elected by the Municipalities of the Northern Division

Mr V. J. Patel, Bar-at-Law, Elected by the District Local Boards of the Northern Division

Sardar B. A. Saheb Patwardhan, Chief of Kurundwad (Senior), Elected by the Sardars of the Deccan.

Mr Abdul Hussein Adamji Peerbhoy, Elected by the Muhammadan Community of the Southern Division

Sardar Dulabawa Raisingji, Thakor of Kerwada, Elected by the Sardars of Gujarat

Mr Manmohandas Ramji, Elected by the Indian Commercial Community

Mr Malcolm N. Hogg, Elected by the Bombay Chamber of Commerce

Rao Bahadur S. K. Rodda, Elected by the District Local Boards of the Southern Division

Mr. Narayan Madhav Samarth, Elected by the University of Bombay

Mr S. B. Upasani, Elected by the Municipalities of the Central Division

Mr Harchandral Vishindas, B.A., LL.B. Elected by the Municipalities of the Sind Division

Mr M. De Pomeroy Webb, C.I.E. Elected by the Karachi Chamber of Commerce

Nominated

The Advocate General (*ex-officio*)

Lt.-Col. James Jackson M.B. I.M.S.

Mr G. S. Curtis

Mr Henry Staveland Lawrence, L.C.S.

Dr Dominick Anthony D. Monte

Sir Jamsetjee Jeejeebhoy, Bart.

Mr B. S. Kamat

Mr N. D. Khandalavala, B.A.

Mr J. H. Kothari

Mr J. A. D. McBain

Mr Lalubhai Samaldas Mehta, C.I.E.

Mr J. P. Orr, C.S.I., I.C.S.

Rao Sahib V. S. Nalk

Mr J. F. Nicholson

Rao Bahadur R. M. G. G. Kantha, M.B.

Mr R. P. Pranjpe

Sir Ibrahim Rahimtoola, Kt., C.I.E.

Rao Bahadur G. K. Sathe

Mr W. H. Sharp

Sir F. L. Spott

Surgeon-General R. W. S. Lyons

SECRETARIES TO GOVERNMENT

Political, Special and Judicial—L. Robertson, I.C.S.

J. E. C. Jukes, I.C.S., *Deputy Secretary Judicial and Political Departments* (Temporary)

Revenue, Financial and Separate—The Hon'ble Mr George S. Smour, C.S.I., I.C.S.

General, Educational, Marine and Ecclesiastical—P. W. Monte

Legal Department and Remembrancer of Legal Affairs—George Douglas French, B.A., I.C.S.

Public Works Department—H. F. Beale, and R. J. Kent (*Joint Secretary*)

MISCELLANEOUS APPOINTMENTS (S. C.)

Advocate General, The Hon. Mr M. R. Jardine

Inspector-General of Police, W. L. Berkelev, Souter, C.I.E.

Director of Public Instruction, The Hon. Mr W. H. Sharp

Surgeon-General, The Hon. Surgeon-General R. W. S. Lyons, I.M.S.

Oriental Translator, Muhammad Kadir Shaikh Taluqdari Settlement Officer, R. G. G. Gordon, I.C.S.

Settlement Commissioner and Director of Land Records, C. N. Seddon, L.O.B.

Director of Agriculture and Co-operative Societies, G. F. Keatinge, C.I.E.

Registrar of Co-operative Societies, R. B. Ewbank (on deputation)

George Dick (<i>Officiating</i>)	1702
John Griffith (<i>Officiating</i>)	1705
Jonathan Duncan	1705
Died, 11th August, 1811	
George Brown (<i>Officiating</i>)	1811
Sir Van Nepcan, Bart	1812
The Hon Mountstuart Elphinstone	1810
Major-General Sir John Malcolm, G C B	1827
Lieut-General Sir Thomas Sidney Beckwith, K C B	1830
Died, 15th January, 1831	
John Romer (<i>Officiating</i>)	1831
The Earl of Clare	1831
Sir Robert Grant, G C B	1835
Died, 9th July, 1838	
James Farish (<i>Officiating</i>)	1838
Sir J. Levee Carnac, Bart	1830
Sir William Hay Macnaghten, Bart (b)	
George William Anderson (<i>Officiating</i>)	1841
Sir George Arthur Bart, K C B	1842
Leitch Robert Reid (<i>Officiating</i>)	1846
George Russell Clerk	1847
Viscount Falkland	1848
Lord Elphinstone, G C B, P C	1853
Sir George Russell Clerk, K C B (2nd time)	1860
Sir Henry Bartle Edward Frere, K C B	1862
The Right Hon William Robert Seymour	1867
Viscount Fitzgerald	
Sir Phillip Edmond Wodehouse, K C B	1872
Sir Richard Temple, Bart, K C S I	1877
Honel Robert Ashburner, C S I (<i>Acting</i>)	1880
The Right Hon Sir Jamesergusson, Bart, K C M G	1880
James Braithwaite Pelle, C S I (<i>Acting</i>)	1885
Baron Reay	1885
Baron Harris	1890
Herbert Mills Birdwood, C S I (<i>Acting</i>)	1895
Baron Sandhurst	1895
Baron Northcote, C B	1900
Sir James Monteath, K C S I (<i>Acting</i>)	1903
Baron Lamington, G C M G, G C I E	1903
J W P Muir-Mackenzie, C S I (<i>Acting</i>)	1907
Sir George Sydenham Clarke, G C M G, G C I E (c)	1907
Baron Willingdon, G C I E	1913
(a) Proceeded to Madras on duty in Aug, 1793, and then joined the Council of the Governor-General as Commander-in-Chief in India on the 28th Oct, 1793	
(b) Was appointed Governor of Bombay by the Honourable the Court of Directors on the 4th Aug, 1841, but, before he could take charge of his appointment, he was assassinated in Cabul on the 23rd Dec, 1841	
(c) Afterwards (by creation) Baron Sydenham	

The Madras Presidency.

The Madras Presidency, officially the Presidency of Fort St. George together with the Native States, occupies the whole southern portion of the peninsula, and, excluding the Native States, has an area of 141,075 square miles. It has on the east, on the Bay of Bengal, a coast-line of about 1,200 miles, on the west, on the Indian Ocean, a coast-line of about 450 miles. In all this extent of coast, however, there is not a single natural harbour of any importance, the ports, with the exception of Madras, which has an artificial harbour are merely open roadsteads. A plateau, varying in height above sea level from about 1,000 to about 3,000 ft., and stretching northwards from the Nilgiri Hills, occupies the central area of the Presidency, on either side are the Eastern and the Western Ghats, which meet in the Nilgiris. The height of the western mountain-chain has an important effect on the rainfall. Where the chain is high, the intercepted rain-clouds give a heavy fall, which may amount to 150 inches, on the seaward side, but comparatively little rain falls on the landward side of the range. Where the chain is low, rain-clouds are not checked in their westward course. In the central tableland and on the east coast the rainfall is small and the heat in summer excessive. The rivers, which flow from west to east, in their earlier course drain rather than irrigate the country, but the deltas of the Godavari, Kistna and Cauvery are productive of fair crops even in time of drought and are the only portions of the east coast where agriculture is not dependent on a rainfall rarely exceeding 40 inches and apt to be untimely.

Population.

The population of the Presidency in 1911 was 41,402,000 and that of the Native States was 4,813,000. Hindus account for 89 per cent, Mahomedans for 6, Christians for 3, and Animists for 2. The vast majority of the population is of Dravidian race, and the principal Dravidian languages, Tamil and Telugu, are spoken by 15 and 14 million persons, respectively. Of every 1,000 people, 407 speak Tamil, 377 speak Telugu, 74 Malayalam, 37 Canarese and 23 Hindustani. It is remarkable that of the 41 millions of population all but quarter of a million belong to it by birth.

Agriculture

About 68 per cent of the population is occupied in Agriculture. About 40 per cent having a direct interest as land-owners or tenants. About 86 per cent of the cultivated acre is under food crops, the principal being rice (10.7 million acres), cholam or great millet (5.8 million acres), spiked millet (3.3 million acres) and ragi or millet (2.0 million acres). 24,023 acres are under wheat, 3,079 acres are under barley. About 3.2 million acres are under oil seeds, about 2.7 million acres are under cotton, 26,822 acres are under tea and 43,522 acres are under coffee. Irrigation is unnecessary on the West Coast but on the East about 30.5 per cent of the cultivated area has ordinarily to be irrigated. Irrigation works include 28,890 tanks, 6,164 river channels, 6,114 spring channels, 1,391 acinuts, 391,659 ayakats, wells and 215,736 supplemental wells. The

recent progress of the application of machinery to irrigation on a small scale has been remarkable.

Industries

Comparative poverty in readily exploitable mineral wealth and the difficulty of coal supply prohibit very large industrial development in the Presidency, but excellent work, both in reviving decadent industries and testing new ones, has been done under Government auspices. The only indigenous art employing a considerable number of workers is weaving. There is no system of regular registration in vogue, and the figures given can be regarded only as approximate, but returns show a total of 1,231 factories driven by engines of an aggregate H.P. of 33,417. Of these factories 170 are concerned with cotton.

Trade

The grand total of sea-borne trade of the Madras Presidency in 1914-15 was Rs. 88,15,00,000, a decrease of some 16 per cent owing to war conditions. It would be misleading to cite the year-figures in detail since they were abnormal, the average for the 5 years ending 1910-11 was Rs. 4,01,10,000. The following items in the 1914-15 returns may be mentioned—Exports decreased by 10 per cent in Indian produce and by 26 per cent in foreign goods re-exported. Imports decreased by 23 per cent under the heading merchandise. In the last normal year, about 63 per cent of the trade of the Presidency was with the British Empire and about 42 per cent with the United Kingdom. The port of Madras accounted for 41 per cent of the whole sea-borne trade of the Presidency.

Education

The literate population numbers 3,130,000 in every 1,000, 138 men and 13 women can read and write. Of every 1,000 persons, 6 are literate in English but the total number of women literate in English is only 4,000. There were in 1913-1914, twenty-nine Art Colleges, five Oriental Colleges, three Professional Colleges, 364 Secondary Schools and 26,018 Elementary Schools for males, for females there were two Arts Colleges, 69 Secondary Schools and 1,443 Elementary Schools. In addition to these, all of which were public institutions, there were 368 advanced and 4,224 elementary private institutions for male scholars and 122 for females. The total number of scholars in educational institutions of all kinds was 1,460,945 including 7,094 students in Art and Oriental Colleges, 986 in Professional Colleges, 128,157 in Secondary Schools and 1,200,249 in Elementary schools. The Madras University produces each year about 600 graduates in Arts.

Government.

The Madras Presidency is governed on a system generally similar to that obtaining in Bombay and Bengal. At the head is the Governor usually selected from the ranks of British public men or of ex-Governors of Colonies, with the Governor is associated an Executive Council of three members, two of

H. A. Alvar Narayana Alvar
K. P. Jattara Menon
A. K. Alvarangar Paramanujachariyar
K. K. Ramasami Rama Alvarangar
K. K. Venkatas Krishna Rao Panikulu
D. M. Babadur Venkatasami Ramabhadra
Narasimha Garthi
C. A. Surya Narayana Raju
K. Chittambaramatha Mudaliyar
K. K. Ramana Kavalappara Muppil Navar
T. Zafar ul Siddiq Sahib Shifa ul Mulk
A. M. D. Tanbil Ghulam Muhiuddin Marikkar
J. O. Kishin
Sir Hugh Stein Fraser
F. L. Hart

Agreeing that

I. H. M. Corbett
 N. S. Poulton
 J. Davidson Esq.
 J. L. Poulton
 J. H. Stone
 R. L. Cogge
 S. B. Murray
 Colonel William Montague Ellis R.E.
 A. Luffworth
 Surgeon W. B. Bannerman Esq., M.D., F.R.C.S.
 James Percival Bedford
 H. L. W. Gillman
 C. L. M. Schmidt
 Dewan Bahadur J. D. Swamikannu Pillai
 Hajji Ismael Salt, Khan Bahadur

T. Richmond
 Sir J. I. Spring K.C.I.
 P. Somasundari Chettiar
 V. S. Srinivasa Sastri
 A. Mulleed Ch.
 Raja Sri M. M. Simha Dasa Garu
 Charles George Leddhunter
 SECRETARIES TO GOVERNMENT
Chief Secretary to Government A. Butterworth
 I.C.S.
Revenue, J. Davidson C.S.I., I.C.S.
Local and Municipal Education and Legislation, James Perci Bedford
Public Works (General) Col. W. M. Ellis, R.I.
Joint Secretary, S. B. Murray

SECRETARY TO GOVERNMENT

Chief Secretary to Government A. Butterworth
108

Hermon, 1 David on 681, 108
Local and Municipal Education and Jega u
for James Park Bedford

Public Works (General) Col W M Ellis, h 1
Joint Secretary, S B Murray

BOARD OF REVENUE

Just Member, R B Clegg

Second Member, R C C Carr 10 -

Third Member, N S Brodie, M V

Fourth Member, L. I. Buckley

MICROFILMS: APPOINTMENT

• MISCELLANEOUS APPOINTMENTS

Commissioner of Revenue Settlement, etc., L. 1
Buckley, I C E.

Revenue Survey Department, Director, D. C. Hatchell.

Director of Public Instruction, J. H. Stone, C I F
(17)

Vice Chancellor of Madras University—Justice
Sir John Wallis

Registrar of Madras University, F. Dewsbury.

<i>Inspector-General of Police</i> , P L Moore C I I, I C S	Major General William McIwys	1700
<i>Surgeon-General</i> , Surgeon-General W B Bannerman, C S I	Sir Charles Oakley, Bart	1702
<i>Accountant-General</i> , Krishna Lal Dutta, M A	Lord Hobart	1704
<i>Inspector-General of Prisons</i> , Lt Col R T Macnamara, I M S	Major-General George Harris (Acting)	1705
<i>Postmaster-General</i> , H. C Sheridan	Lord Clive	1709
<i>Collector of Customs</i> , T J Cotton, I C S	Lord William Cavendish Bentinck	1807
<i>Commissioner of Salt</i> , Abhari, etc., A S Brodie	William Petrie (Acting)	1807
<i>Inspector-General of Registration</i> , C R M Schmidt	Sir George Hillaro Barlow, Bart, K C B	1807
<i>President, Madras Corporation</i> P I Moore, C I L	Lieut.-General the Hon John Aber- cromby.	1813
<i>Director of the Kodumal and Madras Obser- vatories</i> , J. Evershed	The Right Hon Hugh Elliot	1814
<i>Supt., Govt Central Museum, and Principal Librarian, Connemara Public Library</i> , J R Henderson	Major-General Sir Thomas Munro, Bart, K C B	1820
<i>Piscicultural Expert</i> , H C Wilson		
<i>Persian and Hindustani Translator to Govern- ment</i> , Major A R Nethercole, I A		
<i>Registrar of Co-operative Credit Societies</i> , L D Swamikannu Pillai, Diwan Bahadur		
<i>Scientific Officer for Planting Industries of S India</i> , R D Anstead		
<i>Consulting Architect</i> , W H Nicholls		

Presidents and Governors of Fort St. George in Madras

William Gyfford	1684
Ellhu Yale	1687
Nathaniel Higginson	1692
Thomas Pitt	1698
Gulston Addison	1709
Died at Madras, 17 Oct, 1709	
Edmund Montague (Acting)	1709
William Fraser (Acting)	1709
Edward Harrison	1710
Joseph Collet	1711
Francis Hastings (Acting)	1727
Nathaniel Elwick	1727
James Macrae	1725
George Morton Pitt	1730
Richard Benyon	1735
Nicholas Morse	1744
John Hinde	
Charles Floyer	1747
Thomas Saunders	1750
George Pigot	1755
Robert Palk	1763
Charles Boucher	1767
Josias DuPre	1770
Alexander Wynch	1773
Lord Pigot (Suspended)	1775
George Stratton	1776
John Whitehill (Acting)	1777
Sir Thomas Rumbold, Bart	1778
John Whitehill (Acting)	1780
Charles Smith (Acting)	1780
Lord Macartney, K.B	1781
Governors of Madras.	
Lord Macartney, K.B	1785
Alexander Davidson (Acting)	1785
Major-General Sir Archibald Campbell, K.B	1786
John Holland (Acting)	1789
Edward J Holland (Acting)	1790
	Died, 6 July, 1827
Henry Sullivan (Acting)	1827
Stephen Rumbold Lushington	1827
Lieut.-General Sir Frederick Adam, K C B	1832
George Edward Russell (Acting)	1837
Lord Phippstone, G C B, P C	1837
Lieut.-General the Marquess of Tweed- dale, K T, C B	1842
Henry Dickinson (Acting)	1848
Major-General the Right Hon Sir Henry Pottinger, Bart, G C B	1848
Daniel Elliot (Acting)	1854
Lord Harris	1854
Sir Charles Edward Ingleby, K C B	1859
William Ambrose Morehead (Acting)	1860
Sir Henry George Ward, G C M G	1860
Died at Madras, 2 August 1860	
William Ambrose Morehead (Acting)	1860
Sir William Thomas Denison, K C B	1861
Acting Viceroy, 1863 to 1861	
Edward Maltby (Acting)	1863
Lord Napier of Merchistoun, K T (a)	1866
Acting Viceroy	
Alexander John Arbuthnot, C S I (Acting)	1872
Lord Hobart	1872
Died at Madras, 27 April, 1875	
William Rose Robinson, C S I (Acting)	1875
The Duke of Buckingham and Chandos	1875
The Right Hon W P Adam	1880
Died at Ootacamund, 24 May, 1881	
William Hudleston (Acting)	1881
The Right Hon M L Grant Duff	1881
The Right Hon Robert Bourke, P C	1886
Lord Connemara, 12 May, 1887 (by crea- tion)	
John Henry Garstin, C S I (Acting)	189
Baron Wenlock	189
Sir Arthur Ellibank Havelock, G C M G	18
Baron Amptill	10
Acting Viceroy and Governor-General 1904	
James Thomson, C S I (Acting)	1904
Gabriel Stokes, C S I (Acting)	1906
Hon Sir Arthur Lawley, K C M G, G C I F	1906
Sir Thomas David Gibson-Carmichael, Bart, K C M G, G C I F (b)	1911
Became Governor of Bengal, 1 April, 1912	
Sir Murray Hammett, K C S I, C I E (Acting)	1912
Right Hon Baron Pentland P C, G C I F	1912
(a) Afterwards (by creation) Baron Napier of Ettrick	
(b) Afterwards (by creation) Baron Carmi- chael of Skirling	

The Bengal Presidency.

The Presidency of Bengal, as constituted on the 1st April 1912, comprises the Burdwan and Presidency divisions and the district of Darjeeling, which were formerly administered by the Lieutenant-Governor of Bengal, and the Rajshahi, Dacca and Chittagong divisions which by the partition of the old Province had been placed under the administration of the Lieutenant-Governor of Eastern Bengal and Assam. The area of the Presidency is 84,092 square miles, and it possesses a population of 46,305,642 persons, included within this area are the two Native States of Cooch Behar and Hill Tippera, which are under the general supervision of the Government of Bengal. The area of the British territory is 78,699 square miles. Bengal comprises the lower valleys and deltas of the Ganges and Brahmaputra, and in the main consists of a great alluvial plain intersected in its southern portion by innumerable waterways. In the north are the Himalayan mountain and submontane tracts of Darjeeling and Jalpaiguri, and on the south-east the hills in Hill Tippera and Chittagong, while on the west the Chota Nagpur plateau is continued by an undulating tract running through the western portions of Midnapur, Bankura, Burdwan and Birbhum. The general range of the country however is very low, and a great fertile plain extends southward from Jalpaiguri to the forests and swamps known as the Sunderbans, which lie between the area of cultivation and the Bay of Bengal.

The People

Of the inhabitants of the Presidency 24,237,238 or 52.4 per cent are Mahomedans and 20,945,379 Hindus. These two major religions embrace all but 2.4 per cent of the population. Christians, Buddhists, and Animists combined number a little over 1,100,000.

Bengali is spoken by ninety-two per cent of the population of the Presidency and Hindi and Urdu by four per cent. The Oriya speaking people number nearly 300,000 and Naipali is the tongue of 89,000 persons principally residents in the Darjeeling and Jalpaiguri districts. The great majority of the speakers of the Munda languages are Santals in West and North Bengal.

Industries

According to the returns of the Census of 1911 nearly 35½ million persons or three-fourths of the population derive their support from pasture and agriculture, and of these 30 millions are cultivators, and 3½ millions farm servants and field labourers. The area under jute in 1915 is estimated at 2,086,270 against 2,872,604 in 1914. In some parts of Eastern Bengal this fibre was considerably damaged by floods. Bengal is the most important rice producing area in Northern India and it is computed that 84 per cent of the cultivated area of the Presidency is devoted to its production. Other crops include barley, wheat, pulses, and oilseeds, the area devoted to the last named being over 2 million acres. Sugar is produced both from the sugar-cane and from the date palm, and tobacco is grown for local consumption in nearly every district of Bengal. The area under tea in 1914-15 was 159,054 acres. There were 207 plantations employing a daily average of 100,598 permanent and 29,840 temporary hands.

Manufactures and Trade

The jute mills of Calcutta constitute the principal manufacturing industry of the Presidency. During 1914-15 sixty-seven working mills employed daily on an average 236,294 persons. The war closed a large central market for the raw material but the Calcutta mills have done very well, sustained as they were by a plentiful supply of cheap material. The net profits earned by them amounted to Rs 1.02 crores as compared with Rs 2.68 crores in 1913-14. The nominal rupee capital employed was Rs 8.57 crores of which Rs 7.93 was paid up capital. Up to the declaration of war the volume of the trade in jute exports was large and the aggregate value rose to Rs 12.97 crores an increase of 11.12 per cent. The total value for the year however fell by 33 per cent. In particular, exports of raw jute declined in value by over 57 per cent the lowest since 1904-05. The net collections realised from the Jute cess for the Calcutta Improvement Trust amounted to Rs 7.90 lakhs in 1914 and Rs 3.31 lakhs for the first three months of 1915. The jute trade represented 52.87 per cent of the total value of the exports of merchandise from Calcutta. Other principal industries are cotton twist and yarn, silk yarn and cloth, hand-made cloth, sugar, molasses and paper. Fifteen cotton mills were at work during 1914-15 employing daily on an average 10,349 persons. The silk weaving industry is in a declining state. There was only one silk factory working during 1914-15 which employed 73 hands. The manufacture of tea is carried on an extensive scale in Darjeeling and Jalpaiguri. In 1914-15 the maritime trade of Bengal reached a total of Rs 161.36 crores. The foreign trade amounted to Rs 138.06 crores the lowest since 1909-10 of which Rs 62.66 crores represented imports and Rs 75.39 crores exports, 96.88 per cent of the foreign trade passed through the Port of Calcutta and the rest through Chittagong. With the readjustment of the boundaries of Bengal and the creation of a new Province of Bihar and Orissa in 1912, the more important coal-fields have passed into the new Province. The number of coalmines worked in 1914-15 was 178. The total output was 4,424,540 tons against 4,649,552 tons raised in 1913-14. The decrease was due to a falling off in the demand for industrial purposes owing to the war. The daily average or person-employed in the mines was 38,879 and there was a notable advance in the use of electricity. Three paper mills produced paper valued at over Rs 65 lakhs.

Administration

The present form of Government dates from the 1st of April 1912, when the administrative changes announced by the King-Emperor at Delhi in December 1911 came into operation. A Governor was then substituted for a Lieutenant-Governor, who had previously been at the head of the Province, and Lord Carmichael of Skirling assumed charge of the office. The Governor is assisted by an Executive Council, two of whom are at present members of the Indian Civil Service and the third an Indian. The

Civil Secretariat consists of the Chief Secretary, who is in charge of the Political Appointment and Judicial Departments, the Revenue Secretary, the Financial Secretary, who also deals with Commercial questions, the General Secretary who deals with questions of Local Self Government and Education and the Legislative Secretary, four Under-Secretaries and one Assistant Secretary. The Government divides its time between Calcutta, Darjeeling and Dacca.

Bengal is administered by five Commissioners under the Governor in Council, the divisions being those of the Presidency, Burdwan, Rajshahi, Dacca and Chittagong. The unit of administration is the District Magistrate and Collector. As Collector he supervises the gathering of the revenue and is the head of all the Departments connected with it, while as District Magistrate he is responsible for the administration of Criminal Justice in the district. The immediate superior of the District Magistrate is the Divisional Commissioner. Commissioners are the channels of communication between the local officers and the Government. In certain revenue matters they are, in their turn, subject to the Board of Revenue in Calcutta, in other matters they are under the direct control of Government.

Justice

The administration of Justice is entrusted to the High Court of Calcutta which consists of the Chief Justice who is a barrister and 18 puisne judges who are barristers, civilians or vakils. Below the High Court are the District and Additional Judges, the Small Cause Court and Subordinate Judges and the Munsifs. Of these officers the District and Additional Judges and a certain number of subordinate judges are also endowed with the power of a Criminal Court while the remainder have jurisdiction in Civil matters only. Criminal Justice is administered by the High Court, the Courts of Session and the courts of the various classes of magistrates. On its appellate side the High Court disposes of appeals from the order of a Court of Session, and it also confirms, modifies or annuls sentences of death passed by Sessions Courts. Calcutta has four Presidency Magistrates, one Municipal Magistrate and also a number of Honorary Magistrates and it possesses a Court of Small Causes with six judges who dispose of cases of the class that are usually heard in County Courts in England.

Local Government.

By the Bengal Act of 1884 which regulates municipal bodies in the interior and its subsequent amendments the powers of Commissioners of municipalities have been increased, and the elective franchise has been extended. Municipal expenditure now comprises a large number of objects, including veterinary institutions and the training and employment of female medical practitioners. The Commissioners also have large powers in regard to the water-supply and the regulation of buildings. In Calcutta Act (III) of 1899 created three coordinate municipal authorities, the Corporation, the General Committee, and the Chairman. The total number of Commissioners is fifty, of whom 25 are elected, and the remainder appointed by Government and by commercial bodies. In order to improve the insanitary and congested

areas of the city, the Calcutta Improvement Trust has been created with extensive powers. In the mofussil, District and Local Boards exercise considerable powers, with regard to Public Works, Education and Medical relief and Union Committees have been formed which deal for the most part with the control of village roads, sanitation and water supply.

Finance

As in other Provinces, the revenue is divided between the Local Government and the Government of India. The Budget for 1915-16 shows an opening balance of Rs. 2.81 crores, estimated revenue amounted to Rs. 6.18 crores and expenditure aggregated Rs. 6.55 crores. Of the closing balance of Rs. 211 lakhs, Rs. 220 lakhs was earmarked for various objects.

Public Works

The Public Works Department is at present under the charge of a Chief Engineer and a temporary Chief Engineer whose appointment has been sanctioned for five years. The redistribution of territories on 1st April 1911 caused considerable change in this Department and almost all the irrigation works in the province of Bengal as well as two out of three Canal Revenue Divisions went to the Province of Bihar and Orissa. There was also considerable reduction in the staff and in the number of Public Works Circles and Divisional Public buildings are erected by the Department which also constructs roads and carries out miscellaneous improvements. Irrigation works in Bengal are under the charge of the Irrigation Department which deals with the numerous waterways that intersect the Province.

Police

The Bengal Police force comprises the Militia Police, the District Police, the Railway Police, and the River Police. The District Police are under the control of the Inspector General of Police who is usually a Covenanted Civilian, although the office is open to gazetted members of the force. Under him are Deputy Inspectors General for the Dacca Range, the Rajshahi Range, the Presidency Range, and the Burdwan Range, and also a Deputy Inspector General in charge of the C.I.D., the Railway and River Police. Each district is in charge of a Superintendent, and several of the more important districts have an Additional Superintendent. The cadre comprises Assistant Superintendents, Deputy Superintendents, Inspectors, Sub-Inspectors, head constables and constables. There is also a Village Police, composed of daddars, and chowkidars, who receive monthly salary which is collected from the villages by the Panchayat. The Calcutta City Police is a separate force maintained by Government under a Commissioner who is responsible direct to Government. The Commissioner has under him Deputy Commissioners, Inspectors, Sub-Inspectors, head constables and constables, and a reserve force of about 100 European sergeants. A school for the training of recruits for the Calcutta Police force has recently been established at Calcutta. There is a training college and school at Surda, in the district of Rajshahi where newly appointed gazetted officers, Sub-Inspectors and constables learn their duties. There is another school at Dacca for the training of constables. The annual cost of the Police is nearly Rs. 100 lakhs.

Medical

Medical
The head of the Medical Department is the Surgeon General with the Government of Bengal, and Sanitation is in charge of the Sanitary Commissioner, both these officials being members of the Indian Medical Service. There is also a Sanitary Engineer for the Presidency in the districts the Civil Surgeons are responsible for medical work. There are 20 hospitals in Calcutta 9 of which are supported by the Government and 388,677 persons are treated at these institutions annually, of whom nearly 33,427 are in-patients. In the mofussil districts there are several hundred hospitals and dispensaries, the number of patients treated annually in the Province were 5,571,324 including 60,005 in-patients.

Education

Education

In the Presidency of Bengal education is imparted partly through Government agencies and partly through private bodies, assisted in large measure by Government grant-in-aid. Government maintains three Arts Colleges in Calcutta (of which one is a college for women and one the Sanskrit College), one at Ilwathi, one at Krishnagar, one at Dacca, one at Rajshahi and one at Chittagong. It also maintains two training colleges, one at Calcutta and one at Dacca for teachers who teach in secondary schools through the medium of English and the medium of the vernacular, also an engineering college at Sibpur and an engineering school at Dacca, a medical college, a veterinary college, a school of art and a commercial school in Calcutta and a weaving school at Serampore. It also provides at the headquarters of all districts, except Burdwan and Midnapore, and also at certain other important centres, High English schools for the education of boys, while to each Government Arts College a high school is attached. In Calcutta there are three high schools for boys, two of which are attached to Presidency College and one to the Sanskrit College. Government high schools for girls exist only in the headquarters and Chittagong. The other secondary schools, with the exception of a few middle schools, are under either by Government or by boards, are under private control. The administration of primary education in all areas which are not under municipalities, rests with the district boards. Large grants being given from provincial revenues to the boards which contribute only slightly from their own funds. One is, however, added, or directly added, by Government. Apart from the institutions referred to above 115 institutions called Gurukul Training Schools are maintained by the Department for the training of Mahomedan students for the education of Calcutta, Dacca, Chittagong and Midnapore which are managed by Government. There are also a number of other institutions for technical and industrial work. The proportion of educational work of Government is under the control of Government bodies which are assisted by Government grant-in-aid.

Presidency.

The municipalities are required to expend a certain proportion of their ordinary income on education. They are mainly responsible for primary education within their jurisdiction but schools in these areas are eligible also for grants from Government. These bodies maintain a second grade Arts College and a high school at Midnapore, a high school at Burdwan, a high school at Santipur and a high school at Calttagong.

— in the Presidency —

There are now in the Presidency --

Arts Colleges	1
Law	1
Medical College	1
Engineering College	2,557
Training Colleges	3,902
Secondary Schools	3,728
Primary Schools	2,274
Special	
Private Institutions	

with 799,580 pupils in all

The Government Educational Budget allocation for the province for 1914-1915 is Rs. 1,45,40,000. Of this a large proportion represents the grants recently allotted by the Government of India to the Government of Madras for the purpose of administering the Government of Madras.

[illegible]

Cuttack College, Principal, J R Barrow
 Sanskrit College, Principal, Dr S C Acharya
 Hughli College, Principal, J Bottomley
 Krishnagar College, Principal, S C Day
 Bethune College, Calcutta, Lady Principal
 Miss S Ghosh

PRIVATE ARTS COLLEGES *Aided*

Scottish Churches College, Calcutta, Principal
 Rev J Watt
 St Xavier's College, Calcutta Rector, Rev
 Father Crohan
 L M S College, Bhowanipore (Calcutta),
 Principal, Rev A Sims
 Jagannath College, Dacca, Principal, F L M
 Chatterji Bahadur
 Brijamohan College, Barisal, Principal, N L
 Mookherjee
 Anandamohan College, Munshsingh, Principal
 Dr J Ghosh
 Victoria College, Comilla, Principal Satendra
 Nath Basu
 Wesleyan College Bunkura, Principal Rev J
 Mitchell
 Victoria College, Narail, Principal Gopal
 Chandra Maltra
 Hindu Academy, Daulatpur, Principal Kama
 Khracharan Nag
 Serampore College, Principal, Dr George Howell
 St Paul's Cathedral Mission College Calcutta
 Principal, W S Holland
 Edward College, Patna, Principal R Bose
 Diocesan College, Calcutta, Lady Principal
 Sister Mary Victoria
 City College Calcutta, Principal Haramba
 Chandra Maltra
 Ripon College, Calcutta, Principal, Ramendra
 Sundar Trevedi
 Bangabasi College, Calcutta, Principal G C
 Bose
 Metropolitan Institution, Calcutta, Principal,
 Saradaranjan Roy
 Bishop's College, Calcutta, Principal, Rev R
 Gee
 Central College, Calcutta, Principal, Khudiram
 Bose
 Krishna Chandra College, Hetampur, Principal,
 Dhurumdas Dutt
 Burdwan Raj College, Principal Umacharan
 Bandopadhyaya
 Uttarpara College, Principal, Jogendra Nath
 Mitra
 Krishna College, Berhampore, Principal, S
 Banerji (offg)
 Loreto House, Calcutta, Lady Principal, Mother
 Gonzaga

MUNICIPAL

Midnapore College, Principal, Jogendra Nath
 Hazra

COLLEGES FOR PROFESSIONAL TRAINING

Engineering—Government

Mill Engineering College, Sibpur Principal,
 B Hanton

Teaching—Government

David Hare Training College, Principal, W L
 Griffith

Dacca Training College, Principal L F Bliss
Aided

L M S Training College Bhowanipore (Cal
 cutta), Rev. A Sims

Medicine—Government

Medical College, Calcutta Principal Lt Col
 J T Calvert

Law

Jayanti Law College, Calcutta Principal,
 Dr Satis

The Law Department, attached to the Dacca
 College, Vice-Principal, Munazzam Ali

The Law Department, attached to the Ripon
 College, Calcutta, Principal, Jankinath Bhat
 tacherji

There are also Bader-ship classes attached
 to the Government Colleges at Dacca, Rajshahi
 Hooghly, Chittagong and Krishnagar and in the
 aided college at Burdwan, the Ripon
 College and the Metropolitan Institution
 Calcutta, and the Municipal College at Midna
 pore

Administration

GOVERNOR AND PRESIDENT IN COUNCIL

His Excellency The Rt Hon Thomas David,
 Baron Carmichael of Skirling G C I R, F C M G
 Took his seat, 1st April, 1912

PERSONAL STAFF

Private Secretary, W R Gourlay

Military Secretary, Capt Henry George Vaux
 Surgeon, Capt W L Harnett, I M S

Aides-de Camp, Capt W P Orock, Middlesex
 Regiment, 2nd Lt Duncan Balfour, Lothian
 and Border Horse

Honorary Aides-de-Camp Lieut-Col C M
 Pearce, I D, Commander E A Constable,
 R A, Lt-Col R Glen, I D, Hon. Col
 C Routh, Lt-Col R S Hawkins, I D Com
 mander Duncan Frederick Vines, R I M,
 Lt Col D A Tyrie, I D

Extra Aide-de-Camp, Lt J. L Mercer, 5th
 Battalion (Queen's Royal West Surrey Regt)

Indian Aide-de-Camp, Risaldar Ismail, Khan
 Bahadur

Commander of Body Guard, Lt H A Garston,
 21st Cavalry

BENGAL EXECUTIVE COUNCIL

N D Beatson Bell Took his seat, November
 1914

P C Lyon C S I Took his seat, 1st April 1912.

Syed Shams ul Huda Took his seat, 1st April
 1912

LEGISLATIVE COUNCIL OF BENGAL

Councillors, Ex-Officio

N D Beatson Bell

Mr. P C Lyon, C S I, I C S

Nawab Syed Shams-ul-Huda

Appointed Officials

Mr J. A. Donald
 F. T. Monahan
 I. A. A. Cowle
 I. H. Kerr, C.I.F.
 Kiran Chandra D. C.I.F.
 C. H. Ramdas
 I. B. A., C.I.F.
 Col W. I. Edwards, C.B. I.M.S.
 Mr F. B. Newbould
 B. K. I. Chandra Mitra
 W. W. Hornell
 P. N. Prasad Nath Mukharji Bahadur
 Mr C. F. Payne
 Non-official
 Nawab Sir Asif Qudr Sayid Wasil Ali Mitra
 Khan Bahadur, K.C.I.O. of Murshidabad
 Mr H. J. Hilary
 Sateendran Prasananna Sinha
 Dr Nilmatan Sarkar
 Raja Hrishikesh Lahiri, C.I.F.
 Lt-Col P. Glen

Fleet

Mr Bromkes Chakravarti
 Sir Bijay Chand Mahtab
 Maharaja Jagadindra Nath Ray
 Raja Sohil Kanta Acharyya Chaudhuri Bahadur
 Dr Deba Prasad Sarbadhikari
 Maulvi Muhammad Ismail Khan Chaudhuri
 Rai Radhacharan Pal Bahadur
 Mr I. W. H. Hugh Bray
 Archibald Blakemore
 W. T. Grace
 G. A. Bayley
 A. W. Cresswell Chaplin
 Gohar Hossain Cassim Ariff
 Munsif Mazharul Anwar Chaudhuri
 Maulvi Musharrat Hussain
 Maulvi Abdul Kasem Fazl ul-Haq
 Nawab Sayid Hossain Haider Chaudhuri
 Khan Bahadur
 Maharaja Pangjit Singh of Nashipur
 Rai Nalinakshi Basu Bahadur
 Raja Mahendra Ranjan Ray Bahadur
 Nawab Sayid Nawab Ali Chaudhuri Khan
 Bahadur
 Babu Prasanna Kumar Roy
 Babu Surendra Nath Banarji
 Babu Surendra Nath Roy
 Babu Mohendra Nath Ray
 Rai Hari Mohan Chandra Bahadur
 Babu Upendra Lal Ray

SECRETARIAT

Chief Secretary to Government, T. G. Cumming, C.I.E.
 Secretary, Revenue Department, I. H. Kerr, C.I.E.
 Secretary, General Department, H. F. Samman
 Secretary, Special Department, H. L. Stephenson
 Secretary, Judicial Department, E. P. Chapman
 Secretary to the Council and Secretary, Legislative Department, A. W. Watson

Secretary to Government Public Works Department, and Chief Engineer, H. H. Green
 Under Secretary to Government, Public Works Department (Irrigation Branch), Anadi Nath Mitra

BOARD OF REVENUE

Member, D. J. Macpherson, C.I.F.
 Secretary, W. A. Marr
 MISCELLANEOUS APPOINTMENTS
 Director of Public Instruction, W. W. Hornell
 Principal, School of Arts, P. Brown
 Inspector General of Police, R. B. Hughes
 Buller, C.I.E.
 Commissioner, Calcutta Police, Reginald Clarke (Offg)
 Conservator of Forests, C. L. Muriel
 Inspector-General of Civil Hospitals, Col G. F. Harris, C.I.I.
 Sanitary Commissioner Major W. W. Clemesha
 Deputy Sanitary Commissioner for Malaria Research, Major A. B. Fry
 Collector of Customs, Calcutta, F. G. I. L.
 McGregor, I.C.S.
 Commissioner of Excise and Salt, A. N. Moherly
 Accountant General, H. G. Tombs, C.I.F.
 Inspector-General of Prisons, Lt-Col W. J. Luchman, C.I.F.
 Postmaster General, P. G. Rogers, I.C.S.
 Inspector General of Registration, P. N. Mukharji
 Director of Agriculture, I. R. Blackwood
 Protector of Emigrants, C. Banks, M.D.
 Chairman of Calcutta Corporation, C. F. Payne
 Superintendent, Royal Botanic Gardens, Major A. T. Gage
 Coroner, F. K. Dobbin
 Registrar of Co-operative Credit Societies, I. M. Mitra

LIEUTENANT GOVERNORS OF BENGAL

Frederick J. Halliday	1854
John P. Grant	1859
Cecil Bordon	1862
William Grey	1867
George Campbell	1871
Sir Richard Temple Bart, K.C.S.I.	1874
The Hon. Ashley Eden, C.S.I.	1877
Sir Stuart C. Bayley, K.C.S.I. (Offg.)	1879
A. Rivers Thompson, C.S.I., C.I.E.	1882
H. A. Cockerell, C.S.I. (officiating)	1885
Sir Stuart C. Bayley, K.C.S.I., C.I.F.	1887
Sir Charles Alfred Elliott, K.C.S.I.	1890
Sir A. P. MacDonnell, K.C.S.I. (Offg.)	1897
Sir Alexander Mackenzie, K.C.S.I.	1897
Retired 6th April 1898	
Charles Cecil Stevens, C.S.I. (Officiating)	1897
Sir John Woodburn, K.C.S.I.	1898
Died 21st Nov 1902	
T. A. Bourdillon, C.S.I. (Officiating)	1902
Sir A. H. Leith Fraser, K.C.S.I.	1903
Lancelot Hare, C.S.I., C.I.F. (Offg.)	1906
F. A. Slucke (Officiating)	1906
Sir E. N. Baker, K.C.S.I.	1908
Retired 21st Sept. 1911	
F. W. Duke, C.S.I. (Officiating)	1911

The office of Lieutenant-Governor of Bengal was abolished on April 1st 1912, when Bengal was raised to a Governorship.

GOVERNORS OF THE PRESIDENCY OF BENGAL

WILLIAM IN BENGAL

The Rt Hon Baron Carnarvon, 1st, of 1912

Skirling, G.C.I.E., K.C.M.G.

The United Provinces.

The United Provinces of Agra and Oudh lie in practically the centre of Upper India. They are bounded on the north by Tibet, on the north-east by Nepal, on the south and south-east by Bengal, on the south by two of the Chota Nagpur States of the Central India Agency and the Saugor District of the Central Provinces, and on the west by the States of Gwalior, Dholpur, Bharatpur, Sirmor, and Jubbah, and by the Punjab. Their total area amounts to 107,207 square miles, to which may be added the area of the two Native States of Tehri and Rampur, both of which lie within the United Provinces, 5,079 square miles and the newly created independent State of Benares with an area of 865 miles, giving a total of 112,346 square miles. The total population is 48,014,080, out of which Tehri and Rampur account for 832,036.

The Provinces, originally termed the North-Western Provinces and so amalgamated in 1877, receiving their present designation in 1902, include four distinct tracts of country: portions of the Himalayas, the sub-Himalayan tracts (the Kumaon), the great Gangetic plain and portions of the hill systems of Central India (Bundelkhand). The first two of these tracts are infertile and support a very sparse population and the Central Indian plateau is almost equally infertile, though better populated. The soil of the Gangetic plain, however, possesses an extreme fertility and here the density of population rises from 512 persons per square mile in the west, to 549 in the centre and 718 in the east, which gives the Provinces as a whole a greater population pressure on the soil than any other Provinces in India. In the south there are low rocky hills, broken spurs of the Vindhyan mountains, covered with stunted trees and jungle, and in the North the lower slopes of the Himalayas, clothed with dense forest, affording excellent big and small game shooting, and rising beyond in a tangled mass of ridges, ever higher and higher, until is reached the line of the eternal snows, but the greater part of the provinces consists of level plain, teeming with highly-cultivated fields and watered by four rivers—the Ganges, Jumna, Gogra and the Gumti.

The People

The population is mainly Hindu, 85 per cent ranking as such whilst Mahomedans number 14 per cent, the total of all other religions being less than 0.6 per cent composed of Christians (Europeans and Indians), Jains, Aryas and Sikhs, the Aryas are the followers of the Arya Samaj sect, which obtains widely in the Punjab and has extended its influence to the United Provinces. The three main physical types are Dravidian, Aryan and Mongoloid, the latter being confined to the Himalayan and sub-Himalayan districts and the former to South Mirzapur and Bundelkhand, whilst the high-caste Aryans frequent the western Districts of the Province. Most of the people, however, show a mixed Arya-Dravidian origin. Three languages are spoken by the great majority of the people in the plains—Western Hindi, Eastern Hindi and Behari, Urdu, or Hindustani, is a

dialect of Western Hindi, though it contains a large admixture of Persian and Arabic words which makes it a *lingua franca*.

Industries

The principal industry is agriculture, which supports no less than 71.7 of the population. The soils of the Provinces fall into three groups, the valley soils of the Himalayas, the main alluvium and the Central Indian alluvium, the chief characteristic soil of the Central Indian alluvium is the black soil, with a lighter variant, though here also there are light loams and gravel. The Himalayan soils are of local origin and vary with the nature of the rock from which they have been formed whilst the main alluvium soils are sand, clay and loam, the loam being, naturally, the most productive. The soil generally yields excellent crops of rice, millet, maize, linseed, cotton, wheat, sugarcane, pulses, barley and poppy, rice being grown mostly in low-lying, heavy clay. The greater part of the Provinces is highly cultivated, the rainfall varies from 30 to 60 inches in the Hills to 40 inches in the Benares and Gorakhpur Divisions, whilst the Agra Division receives about 25 to 30 inches annually only. Drought seriously affected Bundelkhand and the Agra Division, in the past, but improved drainage, and irrigation (a protective system of irrigation works exists and is being extended) have enabled a complete recovery to be made and the agricultural prosperity of the Provinces is now high, though it varies with the rainfall. The great scourge has been, and is, that of plague, which hampers the agriculturist severely, and in the Terai malaria still exacts a large toll. Land is held mostly on the ryotwari tenure in Bundelkhand and Kumaon, on zamindari tenure in Agra and taluqdari tenure in Oudh. The principal land owners in Oudh are the Taluqdars, some of whom own very large estates. The area held in taluqdari tenure amounts to 51 per cent of the total area in Oudh.

Manufactures

The Provinces are not rich in minerals. Coal exists in Southern Mirzapur, iron and copper are found in the Himalayan Districts, and there were mines of importance there formerly, but increased difficulty of working them as veins became exhausted resulted in the closure of most of them. Gold is found in minute quantities by washing in some of the rivers in the Hills. Limestone is found in the Himalayas and stone is largely quarried in the Mirzapur District. Cotton is ginned and spun throughout the provinces, as a home industry, and weaving, by means of hand-looms, is carried on in most districts. In 1901 nearly a million persons were dependent on weaving, 140,000 on spinning and 136,000 on cleaning, pressing, and ginning, but during the last decade these industries have been on the decrease. The largest industry is in Azamgarh District, where there are 130,000 looms. Silk spinning is confined almost entirely to the district of Benares, where the famous *Kinkob* brocade is made. Em-

brothers is manufactured in Lucknow, where the notable work of silk on cotton or muslin is produced and in Benares, where gold and silver work or velvet silk crepe and sarinet are made. The glass industry is important in some districts. Benares and Moradabad are noted for their bequeered brass work, porcelain is manufactured at Ghazipur, and other industries are those of paper-making (Lucknow) dyeing, leather-work and brewworks. The chief centre of European and Indian industry is Cawnpore which is situated in most advantageous position on the Ganges possesses tanneries cotton woollen jute and other mills which have a large and ever increasing output (the woollen mill is the largest in India). There are cotton factories at Allahabad (famous for its locks) Meerut and Bareilly Mirzapur (which produces also excellent carpets), Hardoi and Mathura have cotton mills. Excellent furniture is made at Bareilly, at Allahabad there are stone works at Rosa there is a very large English distillery with patent still and the provinces can claim six breweries, with an out turn of over a million gallons.

The largest trade centres are Cawnpore, Allahabad Mirzapur Benares, Lucknow Meerut, Allahabad Mathura Muttra Agra, Ferozabad, Moradabad Chandauli, Bareilly, Saharanpur, Muzaffargarh Ghazipur Khurja Gorakhpur, Ghazipur Pilibhit and Shahjahanpur.

Administration

The Provinces are administered by a Lieutenant-Governor, who is generally chosen from among the members of the Indian Civil Service who have served in the Province. The medium for the transaction of public business is the Secretariat, the Staff of which consists of five Secretaries and five Under-Secretaries. The Chief Secretary is in charge of the Revenue, Appointment, General Administration, Political and Forest Departments, another Secretary attends to the Medical, Judicial, Police, Educational and Sanitation Departments, whilst a third looks to the local Self Government, Financial, Municipal, Miscellaneous and Separate Revenue Departments. The other two Secretaries belong to the Public Works Department, and are also Chief Engineers, one of whom deals with Irrigation, and the other with Roads and Buildings. Government spends the cold weather, October to April in Lucknow and Allahabad, mostly in Lucknow. The Secretariat moves between these two places. The Lieutenant-Governor and the Secretariat spend the hot weather in Naini Tal, but during the monsoon the Lieutenant-Governor tours the plains as he does also in the highest court of appeal in revenue and rent cases, and it has important executive duties, being the chief revenue authority in the Provinces. There are forty-eight British districts, thirty six in Agra and twelve in Oudh, average area 2,000 square miles and average population a million. Each District is in charge of a District Officer, a Deputy Collector and Magistrate in Oudh and a Commissioner and Magistrate in Agra. The Districts are grouped together in Divisions, Kumaon, who is an Indian Civilian. The Divisions are grouped together in Divisions, having an average area of nearly 12,000 square miles and a population of from 5 to 6 millions.

The Districts are sub-divided into *tahsils*, of which there are 217 with an average area of 500 square miles and a population of 220,000. Each *Tahsil* is in charge of a *Tahsildar*, who is responsible for the collection of revenue, and also exercises judicial powers. *Tahsils* are divided into *parganas* which are units of importance in the settlement of land revenue. Subordinate to the *Tahsildars* are *lanungos*, of whom there are, on an average, three to a *tahsil*. These officials supervise the work of the *parganas* or village accountants, check their papers and form a link direct between the village and Government. For judicial purposes *tahsils* as the case may be to each of his subordinates, as the case may be to each of his subordinates, who may be covenanted civilians, (Joint and Assistant Magistrates and Collectors) or members of the Provincial Service (Deputy Collectors and Magistrates). The Commissioner of the Bareilly and Kumaon Divisions are Political Agents for the Native States of Rampur and Tehri respectively and the Commissioner of Benares is the Political Agent for Benares State.

Justice

Justice is administered by the High Court in the Province of Agra, and the Court of the Judicial Commissioner, in Oudh which are the final appellate authorities in both criminal and civil cases. The former, which consists of a Chief Justice and five puisne Judges, two of whom are Indian, sits at Allahabad and the latter represented by a Judicial Commissioner and two Additional Commissioners, one of whom is an Indian, sits always in Lucknow. There are twenty-seven District and Additional District Judges, (Indian Civilian) twenty-one in Agra and six in Oudh, who have both original and appellate jurisdiction in civil and criminal cases, and occasional appellate jurisdiction in rent cases, but District Officers and their assistants, including *Tahsildars*, preside in both criminal and rent and revenue courts and dispose of a good deal of the work. In Kumaon, the Commissioner is a High Court Judge in Civil cases and a District Judge in Criminal cases. In the larger Cantonments, the Cantonment Magistrates have limited powers as Judges of a Small Cause Court. There are also Subordinate Judges who dispose of a large number of small civil suits being specially empowered, in some cases, to decide suits up to Rs 2,000, but generally they take cases up to Rs 1,000, whilst Subordinate Judges hear cases up to Rs 5,000 Appeals from Munsifs and Subordinate Judges go to the District Judges. Small Cause Court Judges try suits to the value of Rs 500. There are also Honorary Munsifs, limited to Rs 200 suits, and village Munsifs, whose jurisdiction is fixed at Rs 20.

Local Government

Local Government is exercised by means of District and Municipal Boards, the former levying local rates on land-owners, the latter deriving its revenue from octroi and other forms of taxation. The aim is to abolish octroi, because it interferes with through trade. Eighty-five Municipalities possess the privilege of electing their own members and some of them have non-official

Chairmen They are generally composed of nominated and elected members, with an official Chairman, who guides them in their duties. They deal with questions of sanitation, communication, lighting, town improvement, roads, water supply, drainage and education. Grants are made to Boards by Governments in some cases for special purposes from general revenues. There is a tendency in the Provinces to give local self-government a wider extension by means of an increase in the number of boards with non-official Chairmen and recently this privilege has been extended to fifteen Municipalities. Small towns, termed Act XX towns also enjoy some measure of local self-government and it is under consideration to extend the principle here, too.

Finance

The Financial history of the Province has not been a happy one. Inadequate settlements, contracts between the Government of India and the local Government, and the severe famine in 1896 having caused Provincial bankruptcies, which for a long time necessitated rigid economy in order to accumulate reserves which could be spent on productive works. Recently liberal Imperial assignments have been made by the Government of India and the financial prospects are accordingly much brighter, giving hopes that ambitious schemes of reform will be able to be carried into effect. The local Government gets 3.8% of the land revenue. The Provincial Budget for 1915-16 shows an opening balance of 184 lakhs, revenue 55 lakhs, and expenditure 691 lakhs, and a closing balance of 93 lakhs.

Public Works

The Public Works Department is divided into the Roads and Buildings branch and the Irrigation branch, each of which is administered by a Chief Engineer, who is also a Secretary to Government. The Provinces are divided into three circles and ten divisions for the administration of roads and buildings, and into four circles and twenty divisions for irrigation purposes. Each circle is in charge of a Superintending Engineer, and each division is in charge of an Executive Engineer. The whole of the irrigation works constructed or maintained by Government are in charge of the Department, nearly all metalled roads, and also bridges on second-class roads, and generally, all works costing more than Rs 1,000, except in Municipalities. The most important irrigation works within the last twenty years have been the construction of the Betwa Canal, the Fatehpur branch of the Lower Ganges Canal, the Mat branch of the main Ganges Canal, improvements in the Rohilkhand and Terai Canals and extensive drainage operations in the Doab districts of the Meerut and Agra division. Important irrigation extension works are now being considered. The budget for irrigation and other public works for the present year is 144 lakhs.

Police

The Police Force is divided into District and Railway Police and is administered by an Inspector-General, with five Deputies, one of whom is in charge of Railways, and two Assistants, forty-nine District Superintendents,

two Railway Superintendents, and thirty Assistant Superintendents. There is a Police Training School at Moradabad. There is a local C. I. D. forming a separate detective department, under a Deputy Inspector General, with an assistant. There is an armed police specially recruited, and armed with the Martini Rifle. The present cost of the force is 124 lakhs. The administration of the Jail department is in charge of an Inspector General of Prisons, who is a member of the Indian Medical Service.

Education

Education is in part wholly State maintained, and partly by means of grants in aid. There is a State University at Allahabad, a Government Sanskrit College at Benares, whilst Arabic and Persian are taught in special classes at the Muir College Allahabad, which also has a special science side which of late has been greatly extended and there is a Government Engineering College at Roorkee (Thomson College). There are aided Colleges in Lucknow (Canning College), (Reid Christian College), and (Isabella Thoburn College), Agra (St. John's), Aligarh (the Mahomedan Oriental College), Gorakhpur, Cawnpore and Meerut, and an unaided College at Benares, the Central Hindu College. In Lucknow there is the Martiniers school, an entirely independent institution, for European and Anglo Indian children, and there is a Girls' Martiniers connected with it, whilst in the Hill Stations, Naini Tal and Mussoorie, there are many excellent private scholastic institutions for European boys and girls, which are attended by students from all over India. Government maintain Training Colleges, for teachers in Lucknow and Allahabad, an Art Crafts and an Industrial School in Lucknow, and an Agricultural College at Cawnpore. Public Schools are almost entirely maintained by the District and Municipal Boards and primary education is almost entirely in their hands. Primary and female education are in a very backward condition and a Committee has recently been sitting at Naini Tal to suggest a remedy. Technical education is being pushed forward and there is a proposal to establish a Technological Institute in Cawnpore. At the close of 1912 there were 1689 urban schools, attended by 103,138 scholars and 10,003 rural schools attended by 482,355 scholars, and the number of secondary schools for Indian boys was 545, viz, Anglo-Vernacular High Schools 102 with 42,611 scholars, Vernacular Middle Schools 375 with 45,378 scholars and English Middle Schools 68 with 10,284 scholars. The amount budgetted for education this year is 67 lakhs.

Higher education is controlled by the Allahabad University (constd in 1887) which consists of a Chancellor, Vice-Chancellor and seventy-five ordinary and four *ex-officio* Fellows, of whom some are elected by the Senate or by registered graduates and the Faculties, and the remainder nominated by the Lieutenant-Governor, in his capacity of Chancellor. The Faculties are those of Art, Science, Law and Medicine, and the University possesses an important Law School. It is proposed to establish a Mahomedan University at Aligarh and a Hindu University at Benares has now received legislative sanction.

The principal educational institutions are—
The Mahomedan Anglo Oriental College,
Aligarh—Principal, I. H. Towle

The Central Hindu College, Benares—Principal
P. B. Adhikari
St. John's College, Agra—Principal, Rev.
A. W. Davies

Muir College, Allahabad—Principal, S. G.
Tennison

Queen's College, Benares—Principal, P. S.
Lal

Canning College, Lucknow—Principal, M. B.
Channon

Agra College—Principal, T. Cuthbertson
Jones

Red Christian College, Lucknow—Principal,
Rev. T. C. Badley

Mecut College—Principal, William Jesse

Woodstock College, Mussorie—Principal,
Rev. H. M. Andrews

Bireilly College—Principal, J. H. Alderson

Christian College, Allahabad—Principal, Rev.
C. A. E. Janvier

Christ Church College, Cawnpore—Principal,
Rev. M. S. Douglas

Isabella Thoburn College, Lucknow—Principal,
Miss Robinson

Thomason College, Roorkee—Principal, Lt.-
Col. L. H. de Vere Atkinson

King George's Medical College, Lucknow—
Principal, Colonel Selby, I. M. S.

Medical

The Medical Department is in charge of
an Inspector-General of Civil Hospitals.
A Civil Surgeon is in charge and is
responsible for the medical work of each district,
and in a few of the larger stations he has
an assistant. In two stations (Bankhet and
Almora) Medical Officers in military employ
hold collateral civil charge. There are eighty-
three Assistant Surgeons in charge of important
dispensaries and a large number of Indian
hospital assistants. Lady doctors and female
hospital assistants visit *purda nashin* women
in their own homes and much good work is
done in this manner.

The best equipped hospitals, for Indian patients
are the Thomason Hospital at Agra and
the Balrampur Hospital at Lucknow. The
Ramesh Hospital for Europeans at Naini Tal is
a first class institution and there are also the
Lady Dufferin Hospitals. King George's Medical
College and the hospital in connexion with it
have been opened recently in Lucknow.
The College is one of the best equipped in the
country, with a staff of highly efficient professors,
and the hospital is the first in the
Provinces. There is an X-Ray Institute at
Dehra Dun, where valuable research work has
been carried out and the Pasteur Institute at Kan-
nauj take cases from all parts of India, and
there are sanatoria for British soldiers in the
Hills.

Administration

Lieutenant-Governor, Sir J. S. Meston, K.C.S.I.
Assumed charge of office, 16th September 1912
Private Secretary, A. P. Collett, I.C.S.

Honorary Aide-de-Camp, Lieut.-Col. P. H.
Clutterbuck, Lieut.-Col. J. H. E. Beer, C.I.F.,
V.D., Lieut.-Col. J. Walker, V.D., Hony. Capt.
Subadar Major Kanhai Prasad Dube, Risaldar
Major Qudrat Khan Bahadur

LEGISLATIVE COUNCIL OF THE LIEUTENANT GOVERNOR

President, The Lieutenant-Governor.

Vice-President, I. M. Holmes, C.S.I.

Members

H. H. Nawab Sir Muhammad Hamid Ali, Khan
Bahadur, C.I.F., C.C.V.O., Wall of Rampur

Kunwar Aditya N. Singh, of Benares

J. S. Campbell, C.S.I., C.I.F.

Raja Sir Muhammad Tasadduk Rasul Khan,
K.C.S.I.

Nawab Mumtaz ud-daula Sir Muhammad F.
Ali Khan, K.C.I.E., K.C.V.O., C.S.I., of Pahasu.

A. W. Pim

A. L. Saunders, C.S.I.

R. Burn

Rai Nathi Mal Bahadur, C.I.I.

Narsingh Prasad

S. P. O'Donnell

Rana Sir Sheoraj Singh, K.C.I.L.

W. G. Wood

Col. C. Macgregart, C.I.E., I.M.S.

C. F. de la Losse

D. M. Straight

H. R. C. Hailey

H. C. Ferard

F. Mackinnon

Dr. Tej Bahadur Sapru

Rai Gokul Prasad Bahadur

John Mitchell Holm

Mahadeo Prasad

E. H. Ashworth

Salyid Muhammad Abdur Rau

Shankar Sahai Sahib

Balak Ram

Raja Kushalpal Singh

Brij Nandan Prasad

Moti Lal Nehru

Salyid Muhammad Hadi Khan Bahadur

Maharaja Sir Bhagwati Prasad Singh, K.C.I.I.
of Balrampur

Moti Chand

G. T. Anthony

Salyid Raza Ali

Shaikh Shahid Hosain

Asghar Ali Khan

Herbert Watson Pike

Bishambhar Nath

Sukbir Singh

Lt.-Col. S. H. Henderson

H. V. Lovett

Raja Ram Lal Singh, C.I.E., of Kurri-Sudani

Logic P. Watson

Moulvi Salid Karanul Hussain

George Gall Sim.

Pandit Jagat Narayan

Pandit Tara Dut Gairolia

"

SECRETARIAT

Chief Secretary to Government R Burn

Financial Secretary to Government, A W Pim

Judicial " " S P O'Donnell

Secretary to Government, Public Works Dept
(Buildings & Roads, & Railways), W G Wood
CSI

Secretary to Government, Public Works Dept
(Irrigation), G T Anthony

Registrars, I E Lowe, A Grant, W J Summers
F C Richards

BOARD OF REVENUE

Members, J M Holm CSI, J S Campbell,
CSI, CIL

Secretary, J E Goudge

MISCELLANEOUS APPOINTMENTS

Opium Agent, Ghazipur, C L Wild

Director of Land Records and Agriculture, H R
C Halley

Director of Public Instruction, C F de la Londe

Inspector-General of Police D M Straight

Inspector-General of Civil Hospitals Col C
Macgregart, M A, MB, CIL, IMS

Sanitary Commissioner, Lieut.-Col S A Harris,
IMS

Inspector-General of Registration, W Raw

Commissioner of Excise, T A H Wain

Accountant-General, J F Graham

Inspector-General of Prisons, Lt-Col S H
Henderson, MB, CM, IMS

Postmaster-General, C J H Hogg

Chemical Analyser and Bacteriologist, Dr L H
Hankin

LIEUTENANT-GOVERNORS OF THE NORTH

WESTERN PROVINCES

Sir C T Metcalfe, Bart, GCB 1830

The Right Hon the Governor General 1835

in the North-Western Provinces (Lord
Auckland)

T C Robertson 1840

The Right Hon the Governor General 1842
in the North Western Provinces (Lord
Ellenborough)

Sir G R Clerk, KCB 1843

James Thomson Died at Bareilly 1843

A W Begbie, In charge 1853

J R Colvin Died at Agra 1853

L A Reade, In charge 1857

Colonel H Fraser, CB, Child Comdts
Honour, N-W Provinces 1857

The Right Hon the Governor General 1858
administering the N-W Provinces
(Viscount Canning)

Sir G F Edmonstone 1859

R Money, In charge 1863

The Hon Edmund Drummond 1863

Sir William Muir, KCSI 1865

Sir John Strachey, KCSI 1874

Sir George Couper, Bart, CB 1876

LIEUTENANT-GOVERNORS OF THE NORTH WESTERN PROVINCES AND CHIEF COMMISSIONERS OF OUDH

Sir George Couper, Bart, CB KCSI 1877

Sir Alfred Comyns Lyall, KCB 1882

Sir Auckland Colvin, KCMG, CIL 1887

Sir Chas H T Crosthwaite, KCSI 1892

Alan Cadell (Official) 1893

Sir Antony P MacDonnell, KCSI (a) 1895

Sir J J D La Touche KCSI 1901

(a) Afterwards (by creation) Baron MacDonnell

LIEUTENANT-GOVERNORS OF THE UNITED PROVINCES OF AGRA AND OUDH

Sir J J D La Touche, KCSI 1902

Sir J P Hewett, KCSI CIL 1907

L A S Porter, CSI (Official) 1912

Sir J S Meston KCSI 1912

The Punjab.

The Punjab, or land of the five rivers, is so called from the five rivers by which it is enclosed, namely, the Jhelum, Chenab, Ravi, Beas and Sutlej. Together with the North-West Frontier Province and the Native State of Jammu and Kashmir which lie to the north, the Punjab occupies the extreme north-western corner of the Indian Empire, and with the exception of the above mentioned province, comprises all of British India north of Sind and Rajputana and west of the river Jumna. Previous to October 1912, the Punjab with its feudatories embraced an area of 136,330 square miles and a population at the Census of 1911 of 24,187,750 (inclusive of 23,587 trans-frontier Baluchis) that is to say, about one-thirteenth of the area and population of the Indian Empire. But the formation of a separate province of Delhi reduced the area and population of the Punjab by about 450 square miles and 380,000 souls respectively. Of the total area of the Punjab, 36,551 square miles are in Native States (34 in number) with a population of 4,212,704, and 2,566 square miles are tribal territory on the western border of Dera Ghazi Khan district with a population of 23,587.

Physical Features

The greater part of the Punjab consists of one vast alluvial plain, stretching from the Jumna in the east to the Suleman Range in the west. The north-east is occupied by a section of the Himalayas and the Salt Range forms its north-western angle. A few small spurs of the Aravalli mountain system traverse the extreme south-east and terminate in the Ridge at Delhi. The Punjab may be divided into five natural divisions. The Himalayan tract includes an area of 22,000 square miles, with a scanty population living scattered in tiny mountain hamlets. The Salt Range tract includes the districts of Attock, Rawalpindi and Jhelum and part of Shahpur district. Its physical configuration is broken and confused and the mountainous tracts of Murree and Kahuta approximate closely in characteristics to the Himalayan tract. Except in the hills, the rainfall leaves little margin for protection against distress in unfavourable seasons and irrigation is almost unknown. Skirting the base of the hills and including the low range of the Siwaliks, runs the narrow sub-montane tract. This tract, secure in an ample rainfall, and traversed by streams from the hills, comprises some of the most fertile and thickly populated portions of the province. Its population of over four millions is almost wholly agricultural and pastoral but it includes one large town in Sialkot. Of the plains of the Punjab, the eastern portion covers an area of some 36,000 square miles with a population of 10½ millions. East of Lahore, the rainfall is everywhere so far, sufficient that cultivation is possible without irrigation in fairly favourable seasons, but, over the greater part of the area the margin is so slight that, except where irrigation is employed, any material reduction in the rainfall involves distress, if not actual famine. Within the eastern plains lie the large cities of Lahore and Amritsar, and the population in comparison with the western Punjab

is largely urban. The western plains cover an area of 59,000 square miles, with a population of a little over six millions. The rainfall in this area, heaviest in the north and east and decreasing towards the west and south, is everywhere so scanty that cultivation is only possible with the aid of artificial irrigation or upon the low-lying river-banks left moist by the retreating floods. In this very circumstance, these tracts find their scarcity against famine, for there cultivation is almost independent of rain, a failure of which means nothing worse than a scarcity of grass. So little rain is sufficient, and absolute drought occurs so seldom that the crops may be said never to fail from this cause. The western plains embrace the great colony areas on the Lower Chenab and Lower Jhelum Canals which now challenge the title of the eastern plains as the most fertile, wealthy and populous portions of the province. Multan and Lyalpur are the largest towns in the western area. Owing to its geographical position, its scanty rainfall and cloudless skies, and perhaps to its wide expanse of untilled plains, the climate of the Punjab presents greater extremes of both heat and cold than any other portion of India. The summer, from April to September, is scorchingly hot, and in the winter, sharp frosts are common. But the bright sun and invigorating air make the climate of the Punjab in the cold weather almost ideal.

The People

Of the population roughly one half is Mahomedan, three eighths Hindu and one-eighth Sikh. Socially the landed classes stand high and of these the Jats, numbering nearly five millions, are the most important. Roughly speaking, one half the Jats are Mahomedan, one-third Sikh and one-sixth Hindu. In distribution they are ubiquitous and are equally divided over the five divisions of the province. Next in importance come the Rajputs, who number over a million and a half. The majority of them are Mahomedans by religion, about a fourth are Hindus and a very few Sikhs. They are widely distributed over the province. Both Jats and Rajputs of the Punjab provide many of the best recruits for the Indian Army. The Gujars are an important agricultural and pastoral tribe, chiefly found in the eastern half of the province and in the extreme north-west. In organisation they closely resemble the Jats and are often absorbed into that tribe. There are many minor agricultural tribes, priestly and religious castes (Brahmans, Savads and Kureshis), most of whom are landholders, the trading castes of the Hindus (Khatris, Aroras and Banias) and trading castes of the Mahomedans (Khojas, Parachas and Khakhas), and the numerous artisan and menial castes. There are also vagrant and criminal tribes, and foreign elements in the population are represented by the Baluchis of Dera Ghazi Khan and neighbouring districts in the west, who number about half a million and maintain their tribal system, and the Pathans of the Attock and Mianwali districts. Pathans are also found scattered all over the province engaged in

horse-dealing, labour and trade. A small Tibetan element is found in the Himalayan districts.

Languages.

The main language of the province is Punjabi, which is spoken by more than half the population. Western Punjabi may be classed as a separate language, sometimes called Lahndi, and is spoken in the north and west. The next most important languages are Western Hindi, which includes Hindustani, Urdu (the polished language of the towns) and other Hindi, Western Pahari which is spoken in the hill tracts, and Rajasthani, the language of Rajputana, Baluchi, Pushto, Sindhi and Tibeto-Burman languages are used by small proportions of the population.

Agriculture

Agriculture is the staple industry of the province, affording the main means of subsistence to 56 per cent of the population. It is essentially a country of peasant proprietors. About one-sixth of the total area in British districts is Government property, the remaining five-sixths belonging to private owners. But a large part of the Government land is so situated that it cannot be brought under cultivation without extensive irrigation. Thus the Lower Chenab Canal irrigates nearly 1,000,000 acres of what was formerly waste land and the Lower Jhelum Canal, 390,000 acres, and the Lower Bari Doab Canal, when the colonisation scheme is completed, will add 1,200,000 acres to this total. Large areas in the hills and elsewhere which are unsuited to cultivation are preserved as forest lands, the total extent of which is about 3,700 square miles. Of the crops grown, wheat is the most important and the development of irrigation has led to a great expansion of the wheat area, which now occupies in an average year over 8½ millions of acres. The average annual outturn of wheat is 3,000,000 tons, valued at present prices at approximately £20,000,000. Next in importance to wheat is gram, the average annual produce of which is a million tons valued at £5,000,000. Other important staples are barley, rice, millets, maize, oilseeds (rape, toria and sesamum), cotton and sugarcane. Cotton is grown generally throughout the province but the ravages of boll-worm have affected the popularity of the crop. The cotton grown is of the short stapled variety, known as 'Bengals'. The country being preponderantly agricultural, a considerable proportion of the wealth of the people lies in its live-stock. The latest cattle census gives the following figures—cattle, nearly 8,000,000 head, buffaloes, about 850,000, bovine young stock, 3,800,000, sheep, 4,500,000, goats, 4,250,000. Large profits are derived from the cattle and dairy trades and wool is a staple product in the south-west in Kulu and Kangra and throughout the plains generally. The production of hides and skins is also an important industry.

Industries

The mineral wealth of the Punjab is small, rock salt, saltpetre, and limestone for road-building being the most important products. There are some small coal mines in the Jhelum district, with an output of about 50,000 tons a year, and gold-washing is carried on in most

of the rivers, not without remunerative results. Iron and copper ores are plentiful but difficulties of carriage and the absence of fuel have hitherto prevented smelting on a large scale. The Punjab is not a large manufacturing country, the total number of factories being only 221, the majority of which are devoted to cotton spinning, cleaning and pressing. Cotton weaving as a domestic industry is carried on by means of hand looms in nearly every village. The Salvation Army has shown considerable enterprise in improving the hand weaving industry. Blankets and woollen rugs are also produced in considerable quantities and the carpets of Amritsar are famous. Silk-weaving is also carried on and the workers in gold, silver, brass, copper and earthenware are fairly numerous and ivory carving is carried on at Amritsar and Patiala. The trade of the province is steadily expanding, the total internal trade being valued at 634 crores of rupees. The external trade with Afghanistan, Ladakh and Tibet is valued at 31 lakhs.

Administration

The administrative functions of Government are performed by a Lieutenant Governor, appointed by the Governor-General with the approval of the Crown. The Lieutenant-Governor in practice is always a member of the Indian Civil Service though military members of the Punjab Commission are eligible for the position. The Punjab Commission, the body which is responsible for the civil administration of the province is recruited from the Indian Civil Service and the Provincial Civil Service. Up to the date of the separation of the North-West Frontier Province from the Punjab, one-fourth of the cadre was drawn from the Indian Army. The business of Government is carried on through the usual Secretariat which consists of three Secretaries, designated (1) Chief, (2) Revenue and (3) Financial Secretaries, and three Under-Secretaries. There is also at present an Additional Secretary. In the Public Works Department, there are also three Secretaries (Chief Engineer), one in the Buildings and Roads Branch and two in the Irrigation Branch. The heads of the Police and Educational Departments are also Under-Secretaries to Government. The Government spends the winter in Lahore and the summer (from the middle of May to the middle of October) in Simla. The Lieutenant-Governor has no Executive Council, but is assisted in legislative business by a Legislative Council of 24 members, of whom eight are elected and 16 nominated by the Lieutenant-Governor. Of the nominated members, not more than ten may be officials, in addition there may be two nominated expert members. Under the Lieutenant Governor, the province is administered by five Commissioners (for Amritsar, Jullundur, Lahore, Rawalpindi and Multan) who exercise general control over the Deputy Commissioners—28 in number—each of whom is in charge of a district. A district on an average contains four tahsils, each consisting of about 300 villages. The Deputy Commissioner is usually a Covenanted Civilian or military member of the Punjab Commission, although five Deputy Commissionerships are "listed" for Provincial Civil Servants. The Deputy Commissioner has under him one or more Assistant Commissioners (Covenanted).

revenue from forests, registration, courts of law, jails, police and education are wholly provincial as well as the income of district boards and municipalities. The Budget for 1915-16 shows a total revenue (including opening balance) of Rs 5,46,03,000, and a total expenditure of Rs 4,81,64,000 leaving a closing balance of Rs 46,39,000.

Public Works

As was stated in the section on "Administration" the Public Works Department is divided into two branches one for Buildings and Roads and the other for Irrigation. In the former branch, under the Chief Engineer, the province is divided into three circles under Superintending Engineers and 11 divisions under Executive Engineers, while the King Edward Memorial at Lahore also constitutes a special division. The primary object of this branch is the construction and maintenance of Imperial and Provincial works but it also assists municipalities and district boards. The Irrigation branch is under two Chief Engineers, one of whom is also Chief Engineer of Irrigation Works in the North-West Frontier Province. Under them are nine Superintending Engineers in charge of circles and 39 Executive Engineers in charge of divisions. In addition to the work of construction and maintenance Irrigation Officers are responsible for the assessment of water rates leviable on irrigated areas and in several districts where the land revenue demand is assessed on the fluctuating principle, for the formulation of this demand on irrigated crops as well.

Irrigation

The canal system of the Punjab is admittedly one of the greatest achievements of British rule in India. Not including the enormous Triple Canal project now in process of completion, the total irrigated area in British districts and Native States amounts to 3,269,233 acres. The Beas is the only one of the great rivers of the province from which no canal takes off. The Indus provides supplies for two large series of inundation canals, one on either bank. Taking off from the Jhelum is the Lower Jhelum perennial canal, with 150 miles of main channel and 1,000 miles of distributaries and lower down the river is a large series of inundation canals. The Lower Chenab perennial canal takes off from the Chenab and comprises 427 miles of main channel and branches and 2,278 miles of branches, while below the junction of the Chenab and Ravi rivers is a series of inundation canals on both banks. The Ravi provides supplies for the Upper Bari Doab Canal, which has 370 miles of main line and branches and 1,571 miles of distributaries. Some small inundation canals and the Sidhant system with a length of 200 miles also take off from the Ravi. The Sirhind Canal which has a main line and branches of 538 miles and distributaries amounting to 3,703 miles, takes off from the Sutlej, and there are two systems of inundation canals deriving their supplies from the Upper and Lower Sutlej respectively. In addition to the Grey Canals maintained on the cooperative system in the Ferozepore district and a vast series of inundation canals in Bahawalpur

State. The Western Jumna Canal, which takes off from the right bank of the Jumna, has a main line and branches of 377 miles and distributaries of 1,761 miles. The Triplo Canal project is intended to carry surplus water from the Jhelum and the Chenab to supplement the scanty supplies in the lower reaches of the Ravi and incidentally to afford irrigation to the tracts through which the supply channels pass. The three canals included in the project are known as the Upper Jhelum, Upper Chenab and Lower Bari Doab Canal. Of these the Upper Chenab was opened in April 1912 and the Lower Bari Doab in April 1911 and the Upper Jhelum was opened in December. The most interesting feature of this great work is the level crossing at 14 to 15 miles from Lahore, where the Upper Chenab canal supply is passed across the Ravi into the Lower Bari Doab Canal. The revised estimate of the cost of the whole scheme is £6½ millions.

Police

The Police force is divided into District and Railway Police. The combined force is under the control of the Inspector General, who is a member of the gazetted force and has under him three Deputy Inspector Generals, for the Eastern (Ambala), Central (Lahore) and Western (Rawalpindi) Ranges respectively and a fourth Deputy Inspector General in charge of Railway Police, Criminal Investigation, the Police Training School and Finger Print Bureau at Phillaur. The Railway Police are divided into two districts, Northern and Southern each under a Superintendent. The District Police are controlled by Superintendents each of whom is in charge of a district, and has under him one or more Assistant Superintendents. The district is divided into circles under charge of Inspectors, and again into thanas in charge of a Sub-Inspector. The staff of a thana consists on an average of one Sub-Inspector, two head constables and 10 constables. A service of Provincial Police officers has also been established consisting of 18 Deputy Superintendents, who are employed as assistants to the Superintendents. The total police force of the province exclusive of gazetted officers, consists of 1,075 officers and about 20,000 men, practically half of whom are armed with revolvers and bolt action rifles. The village police or chaukidars are under the control of the Deputy Commissioner of each district not of the Police Superintendent. The cost of the Police Force is 58½ lakhs.

Education.

Although the Punjab is usually considered rather a backward province, education has made great strides especially in the last ten years. Government maintain the Government College at Lahore, the Central Training College at Lahore, a Training Class for European teachers at Sanawar (Simla Hills), normal schools at the headquarters of each division, and High Schools at the headquarters of each district, and the Lawrence Military Asylum at Sanawar for European children. There are in the province nine arts colleges (one of them Oriental); 6 professional colleges for males and 1 for females, 111 High

Schools for boys and 16 for girls, 241 middle schools for boys and 45 for girls, 458 primary schools for boys and 70 for girls, 54 schools for special instruction for boys and 12 for girls. The number of pupils attending the Government schools is 2,182 boys and 456 girls. The Government schools are—The Government Oriental, Persian, Christian, Dakhani, and Dakhani and Dakhani Schools at Lahore, the Government Medical College at Lahore, the Government Veterinary College at Lahore, the Government Agricultural College at Lyallpur, the Government Commercial School at Amritsar, the Government School at Ferozepore, the Mayo School of Agriculture at Lyallpur, the Government School at Lahore. There are eight Industrial Schools in the Province maintained by Municipalities or District Boards and others maintained by Municipalities, the Arya Samaj, etc. which receive grants in aid. The education of the destitute community is provided for by a number of secondary boarding schools in 1911, and of primary schools in the Province. The education of the province is provided for by the Agricultural College for Boys and the Government College for Girls at Lahore.

The Education Department is administered by the Director of Public Instruction, who has under him an Inspector of Schools in each civil division with two or more assistants, a District Inspector with assistants in each district, two Inspectors of girls' schools, and an Inspector of European schools. Higher education is controlled by the Punjab University (incorporated in 1882) which has the Lieutenant-Governor as *ex-officio* Chancellor, a Vice-Chancellor appointed by Government and a Senate. In addition to the nine arts colleges already mentioned and the Law and Medical Colleges at Lahore, St. Stephen's College Delhi, and the Hindu College Delhi, and six other colleges in Kashmir, Patiala, Bahawalpur, Kapurthala and the North-West Frontier Province are affiliated to the Punjab University.

Medical

The Medical Department is controlled by the Inspector General of Civil Hospitals (a member of the Indian Medical Service) who also superintends the departments of the Chief Plague Medical Officer and the Chief Malaria Medical Officer. Sanitation is controlled by the Sanitary Commissioner (also a member of the Indian Medical Service) who has under him two Deputy Sanitary Commissioners and is advised by the Sanitary Board, with the Sanitary Engineer as Technical Adviser. Medical work in the districts is in charge of the Civil Surgeons, of whom fourteen are members of the Indian Medical Service and others Military Assistant Surgeons and uncovenanted Medical Officers chiefly Civil Assistant Surgeons. The Mayo Hospital at Lahore and special railway, canal and police hospitals are maintained by Government, but the ordinary hospitals and dispensaries in the districts are maintained by municipal or district funds. Certain private institutions such as the Walker Hospital at Simla and many mission dispensaries receive grants in aid. The

Mayo Hospital at Lahore is being greatly extended and improved as a memorial to King Edward VII. The total number of patients treated at all hospitals and dispensaries in the year is over four and a half millions including nearly 7,000 in patients. A temporary department to combat plague has been organized under the Chief Medical Plague Officer. In the districts the Civil Surgeons are generally in charge of the operations against plague, but additional officers are employed from time to time. There is only one lunatic asylum in the Province at Lahore but there are ten leper asylums. The Pasteur Institute at Kasauli performs the functions of a provincial laboratory for the Punjab. Vaccination is supervised by the Sanitary Commissioner, but is more particularly the concern of the Deputy Sanitary Commissioner who has under him a special staff. Civil Surgeons also have a local staff of vaccinators under them.

Administration

Present Governor Sir M. F. O'Lawer KCSI
Assumed charge 1912

PERSONAL STAFF

Private Secretary Lieut. Col. F. C. Baxley CIE
Honorary Aide-de-Camp Lieut. Col. W. T. Wright Hon. Capt. Gopala Rikardar Major Muhammad Hayat Khan Subedar Bakadur Gulab Singh

LEGISLATIVE COUNCIL

President The Lieutenant-Governor
Vice-President A. H. Black, CVO

MEMBERS

Nominated

Nawab Sir Bahram Khan K.C.I.
J. C. Godley, C.S.I.
Sir M. W. Fenton K.C.S.I., I.C.S.
Sundar Singh, Majithia, Sardar Bahadur
Col. H. Hendley M.D. I.M.S.
A. H. Black, C.V.O.
C. A. Barron, C.I.E.
P. I. Fagan
S. W. Grieco
Razadar Bhatta Ram
Khawajah Yusuf Shah, Khan Bahadur
Nawab Ebrahim Ali Khan of Kunjpur
J. P. Thompson
Col. R. S. MacLagan C.B., C.S.I.

Elected

J. Currie
Lala Kashi Ram of Ferozepore
Ram Saran Das of Lahore
Hari Chand of Multan
Gajjan Singh of Ludhiana

Dakhshi Sohan Lal of Lahore
 Malik Muhammad Amin Khan of Sharnabad
 Sir P C Chatarji, CIE
 Secretary, S W Gracey

SECRETARIAT

Chief Secretary, C A Barron, CIE, ICS
 Revenue Secretary, J P Thompson, ICS
 Financial Secretary, O F Lumsden
 Registrar, W Burr-Bryan, ICS

PUBLIC WORKS DEPARTMENT

Irrigation Branch

Secretaries, T R John Ward, CIE, ICS
 ICS

Buildings and Roads Branch

Secretary, Col R S MacLagan, CB, CSI
 ICS

REVENUE DEPARTMENT

Financial Commissioners, A H Black, CVO
 Sir M W Fenton, KCSI

Director of Agriculture and Industries, C A
 B H Townsend, BA, ICS

Director of Land Records, Inspector Genl of
 Registration, and Registrar General, I French,
 CIE

Director of Fisheries, G C L Howell

MISCELLANEOUS APPOINTMENTS

Director of Public Instruction, J C Godley, CSI
 Inspector-General of Police, Lieut Col H T
 Dennis, IA

H A Close (N W Frontier Province)

Conservator of Forests, R C McInosh
 Inspector-General of Civil Hospitals, Colonel
 Harold Hendley, MD, ICS
 Sanitary Commissioner, Lt Col Sydney
 Browning Smith, (D.P.H.), ICS
 Inspector General of Prisons, Lt-Col G F W
 Braide
 Accountant General, W Alder, ICS
 Postmaster General, G R Clark, ICS

Registrar of Co-operative Credit Societies
 and Joint Stock Companies, A Langley

METRIC GOVERNORS OF THE PUNJAB

Sir John Lawrence, Bart., GCB	1859
Sir Robert Montgomery, KCB	1859
Donald Friell McLeod, CB	1861
Major General Sir Henry Durand	1870
KCSI CB, died at Tonk, January 1871	
R H Davies, CSI	1871
R D Egerton, CSI	1877
Sir Charles U Aitchison, KCSI,	1882
CIE	
James Broadwood Lyall	1887
Sir Dennis Fitzpatrick, KCSI	1892
William Mackworth Young, CSI	1897
Sir C M Rivaz, KCSI	1902
Sir D C J Ibbetson, KCSI, resigned	1907
22nd January 1908	
T G Walker, CSI (offg)	1907
Sir Jouis W Dine, KCIF, CSI	1903
James McCrone Douie (offg)	1911
Sir M R O Dwyer, KCSI	1913

A third important branch of industry consists of working mines and quarries, in which Burma is particularly rich. The petroleum fields are in the Dry Zone, chiefly at Yenangyaung in the Magwe District where the principal extractor is the Burma Oil Company. The total output of petroleum for the Province in 1913 was nearly 273 million gallons, in 1914 nearly 255 million gallons. In the Ruby Mines District, the Burma Ruby Mines Company at Mogoke produced in 1914 stones valued at £44,000. 3704 ounces of gold were won by the Burma Gold Dredging Company from the bed of the Irrawaddy River, north of Myitkyna.

The Burma Mines Company at Dawdwin in the Northern Shan States produced 24,901 tons of lead slag, valued at Rs 6 lakhs and 8,769 tons of silver lead ore valued at 230 lakhs. 10,482 tons of iron ore were mined in Mandalay district, and 8,553 tons of zinc ore, valued at Rs 10 lakhs, in the Southern Shan States. The Tawmaw Mines of the Myitkyna District produced 406 tons of jade, valued at Rs 2 lakhs.

Tungsten ores, chiefly wolfram, are mined in Tavoy, Mergui and the Southern Shan States. Unofficial returns give the output in the year 1913 as 2,700 tons or nearly twice as much as the United States produces. In five years Burma has risen to the first place amongst countries producing these valuable ores with the United States and Portugal bracketed second.

The rubber industry is still in its infancy, only 10 plantations employing more than 20 persons. The plantations are situated in the Mergui, Amherst, Hanthawaddy and Toungoo Districts. At the Census of 1911, 4,047 people were returned as engaged in the production of rubber. The total quantity exported in 1914-15 was 8,816 cwt. The prospect of rubber in this Province is very promising, but the estimates of the output in the immediate future have been framed in the sanguine spirit of the company promoter and are not likely to be realized.

Manufactures

There are 424 factories, 240 of which are engaged in milling rice and 89 are sawmills. The remainder are chiefly cotton ginning mills, oil mills for the extraction of oil from groundnuts, and oil refineries connected with the petroleum industry. The average daily number of operatives rose from 50,723 in 1912-13 to 63,066 in 1913-14. The increase was chiefly in rice-mills. At the Census of 1911, 409,743 or only 6.6 of the total population were engaged outside agriculture and production.

As is the case in other parts of the Indian Empire, the imported and factory-made article is rapidly ousting the home-made and indigenous. But at Amarapura in the Mandalay District, a revival has taken place of hand silk-weaving. Burman wood-carving is still famous and many artists in silver still remain, the finish of whose work is sometimes very fine. Bassins and Mandalay parasols are well known and much admired in Burma. But perhaps the most

famous of all hand made and indigenous industries is the lacquer work of Pagan with its delicate patterns in black, green and yellow traced on to a ground work of red lacquer over bamboo. Lacquered articles ranging from those of the most exquisite finish to those of a coarse description are produced at Pagan on the Irrawaddy and are sold throughout the length and breadth of Burma.

Trade

The total value of the foreign trade in 1914-15 was only 29.1 lakhs, a decline of 70 per cent compared with the previous year. Imports amounted to Rs 1,109 lakhs, or 10 per cent less than in the previous year. Rangoon, the only port with facilities for distribution of goods, took 56.8 per cent of the foreign trade and 83.2 per cent of the Indian trade. The net customs duty was Rs 116 lakhs or 32 per cent less than in 1913-14. The decline in trade was due less to lack of demand than to shortage of shipping owing to the war. Trade with India increased by 5 per cent to Rs 2,562 lakhs.

The most important item of merchandise imported into Rangoon is manufactures of cotton, which account for 25 per cent of the total import trade. These imports are valued at Rs 260 lakhs. The United Kingdom took 61 per cent of the total import trade in 1914-15.

Administration

In 1897 the Province, which had formerly been administered by a Chief Commissioner, was raised to a Lieutenant Governorship. The head of the Province is therefore now the Lieutenant-Governor. He has a Council of seventeen members, one of whom is elected by the Burma Chamber of Commerce, one by the Rangoon Trades Association and the remaining fifteen are nominated by the Lieutenant Governor. Not more than seven members may be official, the rest must be non-officials and at least four must be selected from the Burmese population, one from the Indian and one from the Chinese community.

Burma is divided administratively into Upper Burma (including the Shan States and Chin Hills) and Lower Burma. The Shan States are administered by the Chiefs of the States, subject to the supervision of the Superintendents in the case of the Northern and Southern Shan States, and to the supervision of the Commissioners of the adjoining Divisions in the case of the other States. The Civil, Criminal and Revenue administration is vested in the Chief of the State, subject to the restrictions contained in the sanad. The law administered is the customary law of the State.

The Chin Hills are administered by a Superintendent.

Under the Lieutenant-Governor are eight Commissioners of divisions, four in Upper and four in Lower Burma. Commissioners in Upper Burma and the Commissioner of the Arakan Division are ex-officio Sessions Judges, but the other three Commissioners have been relieved of all judicial work.

religion, to attend that school, shaving his head and for the time wearing the yellow robe. At the hpoongyi-kyauangs the boys are taught to read and write and an elementary and naive system of arithmetic. The result is that there are very few boys in Burma who are not able to read and write and the literacy of Burman is 412 per mille. Education in Burma is

Police

Another feature of education in Burma is the excellent work of the American Baptist Mission which has established schools in most of the important towns in Burma, as well as a College in Rangoon.

There are four other Deputy Inspectors General, one each for the Eastern and Western Ranges, one for the Palwar and Criminal Investigation Department and one for the Military Police.

The sanctioned strength of the Civil Police Force at the end of March 1910 was 1456 officers and 14,316 men but the numbers fell 1008 short of the sanctioned strength 1st January 1914 of the Military Police on the 1st January 1914 was 15986 officers and men. The Pangoon Town Police stand at 74 officers and 1191 men.

A special feature of Burma is the Military Police. Its officers are deputed from the Indian Army. The rank and file are recruited from natives of India with a few Kachins, Karens and Shans. The organisation is Military, the force being divided into Battalions. The object of the force is to supplement the regular troops in Burma their duties, apart from their Military work, is to provide escorts for special persons etc and guards for Treasuries, Jails and Courts.

Education.

Education.

At the head is the Director of Public Instruction with an Assistant Director. There are 10 Inspectors of Schools belonging to the Imperial and one belonging to the Provincial Service, and 7 Assistant Inspectors belonging to the Provincial Service. The Rangoon College is staffed by a Principal and nine Professors drawn from the Imperial Service. Outside the Department is the Educational Officers who hold certain examinations and are on an advisory body on educational questions referred to by the Government.

There is no University but it has two and the Baptist

Burma has no University but it has two Colleges the Burmese College and the Baptist College which are affiliated to the Calcutta University. Under Government there are—

An Arts College, Law School, Reformatory School, School of Engineering, Apprentice School, Each University for Europeans, High School at Tanjavur for the sons of Shan Chak, 5 Normal Schools, 15 Anglo-Vernacular High Schools, 18 Anglo-Vernacular Middle Schools and 44 Vernacular Middle Schools.

[illegible]

Medical

Medical.
The control of the Medical Department is vested in an Inspector-General of Civil Hospitals. Under him are 41 Civil Surgeons. There is also a Sanitary Commissioner, two Deputy Sanitary Commissioners, an Inspector-General of Prisons, three whole time Superintendents of Prisons, a Chemical Examiner and a Bacteriologist and a Superintendent of the Lunatic Asylum.

A Civil Surgeon is in charge of each District, while at the summer Headquarters of Matamoros there is a special Civil Surgeon.

The total number of Hospitals and Dispensaries was 270 at the end of March 1914. The Rangoon General Hospital is perhaps the finest in the East.

The Pasture Institute was opened in Rangoon in July 1915. The Institute is a Senior Member of the Indian Medical Service.

The total number of patients treated in 1913 was 1514 4/9

Administration.

Administration. Part I
Lieutenant Governor Sir Hargrave
F.C.I.C.I.E. Appointed 1915
F.C.I.C.I.E. Appointed 1915

Private Secretary H C Gaudin
J. Heath

Private Secretary to
the Secretary of Health

Private Secretary to
 Aide-de-Camp (J Heath
 Honorary Aide-de-Camp Lt.-Col. H Des Vaux
 C.I.E. 1A
 Aide-de-Camp Hon. Capt. Mansel
 Hon. Capt. Mansel

Honorary Aide-de-Camp
 C.I.E. 1A
 Indrajit, Aide-de-Camp
 Khan, Major Bahadur
 Subadar-Major Am...

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LIEUTENANT-GOVERNOR.

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Bihar and Orissa.

Bihar and Orissa lies between 18°-02' and 27°-30' N latitude and between 82°-31' and 88°-26' E longitude and includes the three provinces of Bihar, Orissa and Chota Nagpur, and is bounded on the north by Nepal and the Darjeeling district of Bengal, on the east by Bengal, on the south by the Bay of Bengal and Madras, and on the west by the United Provinces of Agra and Oudh and the Central Provinces.

The area of the British territories which constitute the Lieutenant-Governorship of Bihar and Orissa is 83,181 square miles inclusive of the area of large rivers. In addition to the districts which are directly under British rule, there are two groups of petty estates which lie to the south and south-west of the Province and which under the names of the Tributary States of Orissa and the Political States of Chota Nagpur are governed each by its own Chief under the superintendence and with the advice of the Commissioner of the nearest British Administrative division. The area of these territories is 28,648 square miles and as it is usual to include them when speaking of Bihar and Orissa the area of the whole Province may be stated at 111,829 square miles. Two of the provinces of the Lieutenant-Governorship of Bihar and Orissa, viz, Bihar and Orissa, consist of great river valleys, the third, Chota Nagpur, is a mountainous region which separates them from the Central Indian Plateau. Orissa embraces the rich deltas of the Mahanadi and the neighbouring rivers and is bounded by the Bay of Bengal on the south-east and walled it on the north-west by Tributary Hill States. Bihar lies on the north of the Province and comprises the higher valleys of the Ganges from the spot where it issues from the territories of the Lieutenant-Governor of the United Provinces of Agra and Oudh. Between Bihar and Orissa, but stretching further westward and deep into the hill country, lies Chota Nagpur.

The People

The temporary head-quarters of Government are at Ranchi in Chota Nagpur, while the permanent Capital at Patna is under construction. The Province has at present no hill station.

The Province has a population of 38,435,293 persons which is very little less than that of France and rather more than that of the Bombay Presidency. The province is almost entirely rural, no fewer than 986 per mille of the population living in villages. Even so with 344 persons per square mile, Bihar and Orissa is more thickly populated than Germany. There are only three towns which can be classed as cities namely, Patna, Gaya and Bhagalpur. During the last thirty years the population of Patna, the capital designate, has been steadily diminishing. Hindus form an overwhelming majority of the population. Though the Muhammadans form less than one-tenth of the total population they constitute more than one-fifth of urban population of the province. Animists account for 7 per cent. These are inhabitants of the Chota Nagpur plateau and the Santal Parganas.

Industries

The principal industry is agriculture, Bihar more especially North Bihar, being the "Garden of India". Rice is the staple crop but the spring crops, wheat, barley, oats and the like are of considerable importance. It is estimated that the normal area cultivated with rice in this Province is 17,200,000 acres or 63 per cent. of the cropped area of the Province. Wheat is grown on about 1½ million acres, barley on 1,428,200 acres, maize or Indian-corn on 1,769,300 acres the latter being an autumn crop. Oilseeds are an important crop, the cultivation having been stimulated by the demand for them in Europe. The exports in various kinds of oilseeds amounted to 5,758,390 maunds valued at Rs 3,58,63,482. It is estimated that 2,021,300 acres of land are annually cropped with oil-seeds in the Province. There is irrigation in Gaya, Champaran and Muzaffarpur districts in Bihar and in Balasore and Cuttack in Orissa. The Indigo industry has been steady on the decline during the last twenty years, the total areas sown having decreased from 342,000 acres in 1896 to 109,600 acres in 1911. The principal cause of this has been the discovery of the possibilities of manufacturing synthetic or chemically prepared indigo on a commercial scale, a process chiefly carried out in Germany. All the districts of Bihar with the exception of Purneah are liable to famine. The last serious famine was in 1895-96. In any year in which monsoon currents from either the Bay of Bengal or the Arabian Sea are unduly late in their arrival or cease abruptly before the middle of September the agricultural situation is very grave. It may be said that for Bihar the most important rainfall is that known as the *haua*, due towards the end of September or up to middle of October. Rain at this time not only contributes materially to an increased outturn of the rice crop, but also provides the moisture necessary for starting the spring or *rabi* crops.

Manufactures

Opium was formerly, with indigo, the chief manufactured product of Behar, but in consequence of the recent agreement with the Chinese Government the Patna Factory has been closed. At Monghyr the Peninsular Tobacco Company have erected one of the largest cigarette factories in the world and as a result tobacco is being grown much more extensively. There are two important iron works in the Singhbhum District, Messrs Tata & Co's Iron and Steel Works at Sakchi and the Bengal Iron and Steel Company at Dhuia. Both these works possess considerable economic possibilities and are likely to have a far reaching effect on the iron and steel trade of India in the future. By far the most important of the mineral industries in the province is that concerned in the raising of coal. The coalfields in the Manbhum District have undergone an extraordinary development in the past twenty years. Though the limits of the district include a portion of the Raniganj field, its fame as a coal-producing area is now identified practically with the Jharla field. The importance of the industry may be said to date from the opening of the railway from Barakar to Duanbaid and Katras in 1894, and

from Kusunda to Pathordi in 1895. In 1894 the outturn of all the mines in the district was only 126,656 tons. In 1895 it rose to 1,281,294 tons the enormous increase being almost entirely from the Jharia field. In the two succeeding years there was a set back, but from 1898 there was a steady rise in the outturn which first touched two million tons in 1901. In 1905 the outturn had swelled to nearly three million tons and in 1906 to nearly four millions, in 1907 over 5,800,000 tons were raised and in the following year no less than seven million tons. In 1914-15 the production of Indian coal had been raised to 16,404,000 tons valued at Rs. 553 lakhs. Of this total 56 per cent was raised in the Jharia fields and 30 per cent from the Raniganj coal fields of Bengal. The entrance of the Bengal-Nagpur Railway in the Jharia field in 1904, and the subsequent extension of various small loops and branches, besides innumerable sidings from both systems, the doubling of the line from Barakar to Dhanbaid, the opening of the section of the East Indian Railway of the Grand Chord from Dhanbaid to Gomoh have all contributed to this rapid development. The tendency, however, which was manifest in 1907 and 1908 to open out new collieries has been checked. Giridih in Hazaribagh is also the centre of a considerable coal-mining industry, containing, as it does, mines owned and worked by the East Indian Railway Company. The Bokaro-Ramgarh field in the same district is likely to be of great economic importance as soon as the area is fully opened up by the railway now under construction. It immediately adjoins the Jharia field across the Hazaribagh border. There is a large undeveloped coal supply, it is believed, in the Districts of Palamu and Hazaribagh.

Administration

The Province is administered by a Lieutenant-Governor in Council. The Lieutenant-Governor is appointed by the Crown and is a senior member of the Indian Civil Service. He is assisted by a Council of three members, two of whom are drawn from the Indian Civil Service while the third, in practice, is an Indian. Each member takes charge of departments and in the event of any difference of opinion regarding inter-departmental references the matter is decided in Council. In practice all important cases are submitted through the member concerned to the Lieutenant-Governor.

The unit of executive administration is the District. The District Officer is styled District Magistrate and Collector, except in the Scheduled districts where he is known as the Deputy Commissioner. The ordinary district jails are placed in charge of a Superintendent, usually the Civil Surgeon while the Magistrate pays periodical visits of inspection. All District Officers are *ex-officio* Registrars, and as *ex-officio* Chairmen of the District Boards, they have control over elementary education, and are charged with the execution and administration of all local public works. In a word, the District Officer is the executive chief and administrator of the tract of country committed to him. As District Magistrate he is also local head of the magistracy who tries all cases, except the more

important which are sent for trial at the Sessions, but except in the Scheduled districts he seldom presides in Court, and his share in this part of the administration is practically confined to the distribution of work, the hearing of petty appeals and the general superintendence of his subordinates. The latter combine Revenue with their magisterial functions and as Deputy Collector exercise under his control many of the powers of a Collector. The police, by whose aid he carries on the criminal administration, have as their local superior a Superintendent, who in all matters, except those concerning the discipline and internal economy of the force, has to carry out such instructions as he receives from the District Magistrate. The Sub-divisional Officers, who are Joint, Assistant and Deputy Magistrates in charge of divisions of districts, occupy, to a great extent, in their own jurisdictions, the position of the District Officer, except in respect of the police, over whom they have only judicial and no executive control. There are 21 Districts.

Above the District Magistrates are the Divisional Commissioners. Their duties are principally those of supervision. In almost all matters they exercise a general superintendence, and especially in the Revenue Department they control the Collectors' proceedings. Commissioners are the channels of communication between the local officers and Government, sifting, collating and bringing together, in a compact form the information they receive. In revenue matters the Commissioner forms a Court of appeal and in this and other respects is subject to the orders of the Board of Revenue. With this exception he is in subordination to Government direct.

The Civil Secretariat consists of the Chief Secretary, who is in charge of the Judicial, Political, Appointment and Education Departments, the Revenue Secretary, the Financial and Municipal Secretary and their three Under Secretaries.

Finance

The Province of Bihar and Orissa was formed with five divisions, detached from the old province of Bengal with effect from the 1st April 1912. The old arrangements made with the Government of Bengal regarding the financial administration of the Province therefore ceased to apply from that date. A fresh arrangement has, however, been made, with the approval of the Secretary of State. As the method adopted was in some measure tentative and provisional, a temporary settlement for a period of three years only has been effected. Owing to the war it has been found necessary to continue the provisional settlement for the present. Under the terms of this settlement the whole of the receipts under the heads of Provincial Rates, Forest, Registration, Courts of Law, Jails, Police, Ports and Pilotage, Education, Medical have been made over entirely to the local Government together with their corresponding charges. In addition to these, it receives three-fourths of the receipts from stamps, assessed taxes, major and minor irrigation works, the whole of the Land Revenue collected from Government Estates one-half of the receipts under all other sub-heads excepting

concerns the conditions and habits of persons in the city and suburbs in their own and their families' lives and the state of the streets, water supply, and other things of the kind.

The city, according to the report of the Board of Health, has been in a state of "great improvement" since the opening of the city in 1898. The Board of Health, in its report, states that the city is "in a state of great improvement" since the opening of the city in 1898.

Public Works.

The Public Works Department in the City of New York is the largest and most important of the city's departments. It is responsible for the maintenance and improvement of the city's public works, including the streets, bridges, and other public buildings. The department is headed by the Commissioner of Public Works, who is appointed by the Mayor.

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Justice.

The administration of justice in the City of New York is the responsibility of the City Court of New York. The City Court is the highest court in the city and is responsible for the administration of justice in the city. The City Court is headed by the Chief Justice of the City Court, who is appointed by the Mayor.

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Local Self-Government.

The City of New York is a city of the first class and is entitled to the same rights and privileges as any other city of the first class. The City of New York is a city of the first class and is entitled to the same rights and privileges as any other city of the first class.

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Chairman of the District Board is appointed by Government, he is usually the Magistrate of the district

Land Tenures

Estates in the Province of Bihar and Orissa are of three kinds. Permanently settled from 1793 to be found in the Patna, Tirhut and Bhagalpur divisions, Temporarily settled as in Chota Nagpur and parts of Orissa. and estates held direct by Government whether as proprietor or managed in the Court of Wards. The passing of the Bengal Tenancy Act (VIII of 1885) safeguarded the rights of the cultivators under the Permanent Settlement Act. Further, the Settlement Department under the supervision of the Director of Land Records takes periodical survey and settlement operations in the various districts both permanently and temporarily settled. In the former, the rights of the under tenants are accorded and attested, while in the latter there is the re settlement of rents. In the re-settlement proceedings, rents are fixed not only of landlords but also for all the tenants. A settlement can be ordered by Government on application made by raiyats.

The tenures of Orissa are somewhat different. Under the zamindars, that is, the proprietors who took settlement from Government and pay revenue to Government direct, is a class of subordinate proprietors of proprietary tenure holders, who were originally village headmen, dealing more or less direct with the revenue authorities. They have a variety of names, such as *mukadam*, *padhan*, *maurus*, *sarbaralar*, *pursethi*, *khariadar* and *shikmi* zamindar. These sub-proprietors or proprietary tenure holders pay their revenue through the zamindars of the estates within which their lands lie. In Chota Nagpur, Orissa and the Santal Parganas, the rights of village headman have been recognised. The headman collects the rents and is responsible for them minus a deduction as remuneration for his trouble.

Police

The Departments of Police, Prisons and Registration are each supervised and inspected by an Inspector General with a suitable staff of assistants under the general direction of Government. The Commissioner of Excise and Salt is also Inspector General of Registration.

Under the Inspector General of Police are three Deputy Inspectors General and 25 Superintendents. There are also 25 Assistant Superintendents of Police and 16 Deputy Superintendents. The force is divided into the District Police, the Railway Police and the Military Police. A Criminal Investigation Department has also been formed for the collection and distribution of information relating to professional criminals and criminal tribes whose operations extend beyond a single district and to control, advise, and assist in investigations of crime of this class and other serious cases in which its assistance may be invoked. There are two companies of Military Police which are maintained as reserves to deal with serious and organised disturbances and perform no ordinary civil duties. The work of the Railway Police is practically confined to offences actually committed on the railways, but they are under the control of the Deputy Inspector General of the Criminal Investigation

Department, and an important part of their duties is to co-operate with the District Police in watching the movements of bad characters by rail. The prevention and detection of crime in the Province generally is entrusted to the District Police. In that work they are assisted by the rural police, known as *chokhidars* and *dafadars*, who form no part of the regular force, but are under a statutory obligation to report all cognizable crime at the police station, and generally to assist in the prevention and detection of crime. They are not whole-time servants of Government, but they are paid a small monthly salary which is realized from the villagers by the panchayat. The cost of the police is Rs 46,48,000.

Education

The Department of Public Instruction is controlled by a Director. There are four Divisional Inspectors of Schools, one of whom inspects European schools in addition to his own duties. 2 Additional Inspectors, 3 Assistant Inspectors, including the Agency Inspector in Orissa, 4 special officers for Muhammadan Education, 24 Deputy Inspectors (exclusive of one in Native States), 180 Sub Inspectors (exclusive of five paid by Native States), 46 Assistant Sub-Inspectors (exclusive of one paid by a Native State) and 259 Guru Instructors (exclusive of nine paid by Native States).

The main divisions of Educational Institutions are Primary, Secondary, Collegiate and Training.

The main object of Primary Schools is to provide the masses with sufficient knowledge of reading, writing, and arithmetic, to secure them in their dealings with the money lender and zamindar or zamindars underlings. Primary Schools for Indian boys are of two classes Upper and Lower.

It is probable that there will eventually be a new University situated at Patna. The important Secondary Schools are the district or Zilla Schools to be found at the head-quarters of each district. The Higher English Schools which include private institutions as well as Government aided schools at sub-divisional head-quarters and Middle English and Middle Vernacular Schools which are under the control of District Boards. The District and Local Boards are also responsible for Primary Education with the assistance of the expert advisers of the Education Department. There are at present seven colleges in the province—two at Patna, one at Bhagalpur, one at Cuttack, one at Hazaribagh, (managed by the Dublin Mission), one at Muzaffarpur and a small College at Monghyr. The number of High Schools for Indian pupils under Public management is 21 with 6,200 pupils, while 44 with 9,350 pupils are aided by public funds. There are 23,231 Primary Schools with an attendance of 645,252 pupils. Of these, 16,802 are maintained or aided by public funds. The village schoolmaster or *guru* is now receiving special training. There are 130 Guru Training Schools for masters and 8 Training Schools for Mistresses. Other special institutions are 36 Industrial and Artisan Schools, two Commercial Schools and 14 Madrasahs, where instruction is given in Arabic and Persian. The expenditure on public education from public funds amounts to Rs 48,93,000.

Medical.

The Medical Department is under the control of the Inspector-General of Civil Hospitals who is a Member of the Indian Medical Service. Under him there are 20 Civil Surgeons who are responsible for the medical work of the districts at the head-quarters of which they are stationed. 50 Dispensaries are maintained by Government—

State Public	14
State Special Police	23
State Canal	5
State Others	8
Total	50

Besides these there are 299 Dispensaries maintained by Local bodies, Railways, private persons, etc. 3,159,646 patients including 46,421 in-patients were treated in 1914. There is one Lunatic Asylum and 8 institutions for the treatment of lepers.

The Sanitation Department is in charge of the Sanitary Commissioner who is directly subordinate to Government as its expert adviser in regard to sanitation. There are three Deputy Sanitary Commissioners who work under the control of the Sanitary Commissioner. Vaccination is carried out by a staff under the direction of the Sanitary Commissioner. There is also a qualified Sanitary Engineer.

Administration

Lieutenant-Governor, Sir Edward Gait, KCSI, OIE. Assumed charge of office, 19th November 1915.

PERSONAL STAFF

Private Secretary, J C B Drake, ICS
Aide-de-Camp, D B Cumming, Indian Police
Honorary Aides-de-Camp, Hon Capt Sardar Bahadur Hira Singh, Subadar Major Sita Ram Singh, Lieut-Col V. N. Hickley, V D, Major A T Peppe

EXECUTIVE COUNCIL

E V Levinge, CSI. Took his seat, 1st August 1912
 Maharaja Bahadur Sir Rameswar Singh, K OIE of Darbhanga. Took his seat, 1st August 1912
 Sir William Vincent, Kt. Took his seat, 19th November 1915

LEGISLATIVE COUNCIL

President, The Lieutenant-Governor
Vice-President, E V Levinge, CSI

Ex-Officio

The Members of the Executive Council—

NOMINATED**Officials**

C E A W. Oldham.
 J. G. Jennings
 L. C. Adams
 J. F. Gruning
 E H. C. Walsh
 G L Searlight

H Coupland
 F Clayton
 H McPherson
 Ahsan-ud-din Ahmad, ICSO.
 L I Hammond
 R T Dundas
 L F Morshead
 J R F Lewis
 F F. Lyall.

Non-Officials

Maharaja Bahadur Sir Ravaneswar Prasad Singh, K OIE
 Rai Bahadur Nishi Kanta Sen
 Madhu Sudan Das, OIE.
 Rev A. Campbell, DD

ELECTED

Keshari Prasad Singh
 Kumar Ghrja Nandan Singh
 Kirtyanand Singh
 Raja Rajendra N Banj Deo
 Kumar Thakural G Prasad Singh
 W A Lee
 T R Filgate, OIE
 Saiyid Fakhr-ud-din, Khan Bahadur
 Vahub Hasan Khan Khan Bahadur
 Saiyid Muhammad Tahir
 Khwaja Muhammad Nur
 Bishun Prasad
 Dwarka Nath Rai Bahadur
 Lachmi Prasad Sinha
 Nimal Charan Mitra
 Sharat Chandra Sen
 Krishna Sahai Rai Bahadur
 Braja Kishor Prasad
 Kumar Sheonandan Prasad Singh
 Sudam Charan Nalk, Rai Bahadur
 Gopi Krishna

SECRETARIAT

Chief Secretary to Government, Political, Appointment, and Educational Department, H. McPherson

Secretary to Government, Financial and Municipal Departments, E L Hammond

Secretary to Government, Revenue Department H Coupland

Secretaries to Government (P W D), Irrigation Branch, F Clayton

Buildings and Roads Branch, G L Searlight

BOARD OF REVENUE

Member, W Maude

Secretary, J A Hubback

MISCELLANEOUS APPOINTMENTS

Director of Public Instruction, J G Jennings

Inspector-General of Police, R T Dundas

Conservator of Forests, H Carter

Inspector-General of Civil Hospitals, Vacant

Sanitary Commissioner, Lt-Col E C Hare, ICS

Inspector-General of Prisons, Lt-Col Bawa. Jivan Singh

Accountant-General, V C Scott O'Connor

Director of Agriculture, G Milne

Registrar of Co-Operative Credit Societies, B. A. Collins

The Central Provinces and Berar.

The Central Provinces and Berar compose a great triangle of country midway between Bombay and Bengal. Their area is 130,991 miles, of which 82,000 are British territory proper and the remainder held by Feudatory Chiefs. The population (1911) is 13,918,308 under British administration and 2,117,002 in the Feudatory States. Various parts of the Central Provinces passed under British control at different times in the wars and tumult in the first half of the 19th century and the several parts were amalgamated after the Mutiny, in 1861, into the Chief Commissionership of the Central Provinces. Berar was, in 1853, assigned to the East India Company as part of a financial arrangement with the Nizam and was transferred to the Central Provinces in 1903, as the result of a fresh agreement with the Nizam.

The Country

The Central Provinces may roughly be divided into three tracts of upland, with two intervening ones of plain country. In the north-west, the Vindhyan plateau is broken country, covered with poor and stunted forest. Below its precipitous southern slopes stretches the rich wheat growing country of the Narbada valley. Then comes the high Satpura plateau, characterised by forest covered hills and deep water cut ravines. Its hills decline into the Nagpur plain, whose broad stretches of shallow black cotton soil make it one of the more important cotton tracts of India and the wealthiest part of the C P. The Eastern half of the plain lies in the valley of the Wainganga and is mainly a rice growing country. Its numerous irrigation tanks have given it the name of the "lake country" of Nagpur. Further east is the far-reaching rice country of Chattisgarh, in the Mahanadi basin. The south-east of the C P is again mountainous, containing 24,000 square miles of forest and precipitous ravines, and mostly inhabited by jungle tribes. The Feudatory States of Bastar and Kanhar lie in this region. Berar lies to the south-west of the C P and its chief characteristic is its rich black cotton-soil plains.

The People

The population of the province is a comparatively new community. Before the advent of the Aryans, the whole of it was peopled by the Gonds and these aboriginal inhabitants fared better from the Aryans than their like in most parts of India because of the rugged nature of their home. But successive waves of immigration flowed into the province from all sides. The early inhabitants were driven into the inaccessible forests and hills, where they now constituted a large portion of the tribes in those parts, who form a quarter of the whole population of the C P. The Gonds are still found in large numbers in all parts of the province, but they are partially concentrated in the south-east. The main divisions of the new comers are indicated by the language divisions of the province. Hindi, brought in by the Hindustani-speaking peoples of the North, prevails in the North and East, Marathi in

Berar and the west and centre of the C P. Hindi is spoken by 56 per cent of the population and is the *lingua franca*. Marathi by 31 per cent and in Berar, and Gond by 7 per cent. The effects of invasion are curiously illustrated in Berar, where numbers of Moslems have Hindu names, being descendants of former Hindu officials who on the Mahomedan invasion adopted Islam rather than lose their positions. The recent census shows that a gradual Brahmanising of the aboriginal tribes is going on. The tribes are not regarded as impure by the Hindus and the process of absorption is more or less civilising.

Industries

When Sir Richard Temple became first Chief Commissioner of the C P the province was land-locked. The only road was that leading in from Jubbulpore to Nagpur. The British administration has made roads in all directions, the two trunk railways between Bombay and Calcutta run across the province and in the last few years a great impetus has been given to the construction of subsidiary lines. These developments have caused a steady growth of trade and have aroused vigorous progress in every department of life. The prime industry is, of course, agriculture which is assisted by one of the most admirable agricultural departments in India and is now receiving additional strength by a phenomenal growth of the co-operative credit movement. The land tenure is chiefly on the zemindari, or great land-lord, system, ranging, with numerous variations, from the great Feudatory chiefships, which are on this basis, to holdings of small dimensions. A system of land legislation has gradually been built up to protect the individual cultivator. Berar is settled on the Bombay ryotwari system. Thirty-eight per cent or about 44,000 square miles of the C P is forest. In Berar the forest area is 3,941 square miles. The rugged nature of the greater part of the country makes forest conservation difficult and costly. Excluding forest and wastes, 57 per cent of the total land is occupied for cultivation, in the most advanced districts the proportion is 80 per cent, and in Berar the figure is also high. The cultivated area is extending continuously except for the temporary checks caused by bad seasons. Rice is the most important crop of the C P, covering a quarter of the cropped area. Wheat comes next, with 15½ per cent, then pulses and cereals used for food and oil seeds, with 11 per cent and cotton with 7 per cent. In Berar cotton occupies nearly 40 per cent. of the cropped area, jowar covers an equal extent, then wheat and oil seeds. In agriculture more than half the working population is female.

Commerce and Manufactures

Industrial life is only in its earliest development except in one or two centres, where the introduction of modern enterprise along the railway routes has laid the foundations for great future developments of the natural wealth of the province. Nagpur is the chief centre of

a busy cotton spinning industry. The Empress Mills, owned by Parsi manufacturers, were opened there in 1877 and the general prosperity of the cotton trade has led to the addition of many mills here and in other parts of the province. The total output of spun yarn now amounts to approximately 50 million yards a year.

The largest numbers engaged in any of the modern industrial concerns are employed in manganese mining. Then follow coal mining, the Jabulpore marble quarries and allied works, the limestone quarries, and the mines for pottery clay, soapstone, &c.

The total number of factories of all kinds legally so described was 438 in 1914, the latest period for which returns are available and the number of people employed in them 47,159. The same economic influences which are operative in every progressive country during its transition stage are at work in the C P and Berar, gradually sapping the strength of the old village industries, as communications improve, and concentrating industries in the towns. While the village industries are fading away, a large development of trade has taken place. The last available reports show an increase in volume by one-third in eight years. In 1914 for the first time, statistics for the Berar factories were incorporated with those of the C P.

Administration

The administration of the Central Provinces and Berar is conducted by a Chief Commissioner, who is the controlling revenue and executive authority and is appointed by the Governor-General-in-Council. He is assisted by three secretaries, two under-secretaries and an assistant secretary. Simultaneously with the jubilee of the foundation of the Province in 1913 a Legislative Council was constituted. It consists of 24 members, excluding the Chief Commissioner, 7 being elected by municipalities, District Councils and Landholders in the C P and 17 nominated by the Chief Commissioner, of whom not more than 10 may be officials and 3 shall be non-officials chosen respectively by the municipalities, District Boards and Landholders of Berar. The Chief Commissioner may nominate an additional member, official or non-official, who has special knowledge of a subject on which legislation is pending. The C P are divided for administrative purposes into four divisions, and Berar constitutes another division. Each of these is controlled by a Commissioner. Berar is divided into six districts, three other divisions into three districts each and one into three, and these are controlled by Deputy-Commissioners, immediately subordinate to the Commissioners. The principal heads of Provincial departments are the Commissioner of Settlements and Land Records, the Inspector-General of Civil Hospitals and Sanitary Commissioners, the Inspector-General of Police, the Inspector-General of Prisons, the Director of Public Instruction, the Commissioner of Excise and Miscellaneous Revenue, and the Director of Agriculture and Industries. The Deputy-Commissioners of districts are the chief revenue authorities and District Magistrates, and they exercise the usual powers and functions of a district officer. The district

forests are managed by a forest officer, usually a member of the Imperial Forest Service, over whom the Deputy-Commissioner has certain powers of supervision, particularly in matters affecting the welfare of the people. Each district has a Civil Surgeon, who is generally also Superintendent of the District Jail and whose work is also in various respects supervised by the Deputy-Commissioner. The Deputy-Commissioner is also marriage registrar and manages the estates of his district which are under the Court of Wards. In his revenue and criminal work the Deputy-Commissioner is assisted by (a) one or more Assistant Commissioners, or members of the Indian Civil Service, (b) one or more Extra-Assistant Commissioners, or members of the Provincial Civil Service, usually natives of India, but including a few Europeans and Eurasians, and (c) by tahsildars and naib tahsildars, or members of the Subordinate service, who are nearly always natives of India. The district is divided for administrative purposes into tahsils, the average area of which is 1,500 square miles. In each village a lambardar, or representative of the proprietary body, is executive headman.

Justice

The Judicial Commissioner is the highest court of civil appeal, and except in cases against European British subjects, in which the High Court of Bombay has jurisdiction, is the highest court of criminal appeal. He is assisted by an Additional Judicial Commissioner for the Central Provinces and another for Berar. The administration of criminal justice was formerly entirely in the hands of Commissioners and the District staff, but Commissioners have now no criminal powers as such and their place as Sessions Judges has been taken by Divisional Judges. By the Civil Courts Act of 1904, the civil has finally been separated from the executive department. The civil staff consists of Divisional Judges, District Judges, Subordinate Judges and Magistrates.

Local Government

Municipal administration was first introduced under the Punjab Municipal Acts and the Municipality of Nagpur dates from 1864. Several revising Acts extend its scope. Viewed generally, municipal self-government is considered to have taken root successfully. The general basis of the scheme is the Local Board for each tahsil and the District Council for each district. In Berar these bodies are called Taluk Boards and District Boards. The larger towns have municipalities. A certain proportion of the Local Board members are village headmen, elected by their own class, others are elected representatives of the mercantile and trading classes and a third proportion, not exceeding $\frac{1}{3}$ of the whole, are nominated by Government. The constitution of the District Councils is similar. The officers of the District Councils are frequently non-officials, but it is generally found convenient that the Tahsildar and Naib Tahsildar should be Chairman and Secretary of the Local Boards. The District Councils have no power of taxation and Local Boards derive their funds in allotments from the District Councils. Rural education and sanitation are among the primary objects to

which these bodies direct their attention and expenditure of famine relief is in the first instance a charge upon the District Council funds

Finance

The main sources of Government income in the province has always been the land revenue, but under Maharatta rule many petty imposts were added in all branches of trade and industry and life in general. Thus there was a special tax on the marriage of Baniyas and a tax of a fourth of the proceeds of the sale of houses. The scheme of Provincial finance was introduced in 1871-72. Special settlements under this system have been necessitated in view of the special circumstances of the province and the recurrence of famine, which a few years ago caused a severe economic strain upon the province. The wave of prosperity which has spread over the country in the past 14 years, since the end of the previous period, has more than trebled the funds available for the administration, compared with what they were before the several years of scarcity, and the progress of the administration and of expenditure has increased correspondingly, without any increase of taxation under provincial heads.

Public Works.

The Public Works Department is controlled by a Chief Engineer, who is also Secretary to the Chief Commissioner. There are two Superintending Engineers for roads and buildings and a third in charge of irrigation. In 1892 a separate division of the Public Works Department was formed for the construction of roads and buildings in the Feudatory States. The expansion of the department and its work has been one of the most remarkable features of the administration in the past decade and a half, largely owing to the demands of a progressive age in regard to communications and new buildings. The Irrigation Branch of the P. W. D. represents a completely new departure. It was formerly the accepted view that the irregular surface of the country would make irrigation canals impossible and that the S. W. monsoon was so regular that it would pay better to relieve famine than to prevent it. Both conclusions have been reversed. Picked officers investigated projects for irrigation when the Irrigation Commission was appointed (1901) and canal and storage works have since been advanced with vigour. The Tandula, Wainganga and Mahanadi canal projects are amongst the more important schemes.

Police.

The police force was constituted in its present basis on the formation of the province, the whole of which, including the Municipalities, is under one force. The strength is equal to one man per 9 square miles of area. The superior officers comprise an Inspector-General whose jurisdiction extends over Berar, Deputy Inspectors-General, in charge of the Eastern and Western range and of the Criminal Investigation Department, and the usual cadre of District Superintendents, Assistant and Deputy Superintendents, and subordinate officers. On three railways special railway police are employed and on others the Provincial force. A Special Reserve of 200 men is distributed over the head-quarters of six districts, for use in dealing with armed disturbers of the peace

in whatever quarter they may appear. The men in this reserve are regularly drilled and armed with rifles. There is a small force of Mounted Police. The Central Provinces have no village police as the term is understood in some other parts of India. The village watchman is the subordinate of the village headman and not a police official and it is considered very desirable to maintain his position in this respect.

Education

The educational department was constituted in 1862 and the scheme then drawn up has remained the basis of the system of public education to the present day. The leading principles are that the department should content itself with the direct management of colleges and higher secondary schools, the training of teachers and inspection in work in rural areas. The maintenance of rural schools should as far as possible be left to the local authorities, every encouragement should be given to private philanthropy and no Government schools should be founded where there existed a sufficient number of institutions capable, with the assistance of the State of supplying the local demand for instruction. At the head of the Department is the Director of Public Instruction, who has a staff of Inspectors and an Inspectress for girls' schools. The Educational Service includes these appointments, except the last. An Agency Inspector supervises the schools of the Feudatory States. The province has three colleges: a Government College at Jubbulpore, and the Morris and Hislop Colleges at Nagpur. The Agricultural Department maintain an Agricultural College at Nagpur. The Colleges are affiliated to Allahabad University, but a demand has arisen for a local University.

After much preliminary discussion, a committee was appointed in July, 1914, to frame a scheme "which shall provide for a University of the teaching type at Nagpur, or in its immediate neighbourhood, and for the affiliation to this central institution of colleges situated in other places in the C. P. and Berar." The committee in their report, issued last year, propose a University presenting some of the features of an affiliating University but possessed of functions and endowed with responsibilities which transcend the scope of those universities in India which conform to that type. "For (says the report) it will not only be an examining but a teaching university, and its teaching activities will not be limited to the provision of courses of instruction for postgraduate degrees, but will embrace several departments of study in the lower courses. The main difference, however, between the university which we propose and existing universities will lie in the closer relations of the former with its constituent colleges. According to our scheme, the University will exercise an effective control over the teaching and discipline of all the institutions which come within its jurisdiction. For it is only by exercising control over its component parts that the Universities can maintain a high standard of moral and intellectual endeavour, and create traditions which will make themselves felt in the development of the Provinces as a whole."

The committee say "The University which we propose will possess powers which will entitle it to a high place in the administrative machinery of the Provinces. But administrative autonomy involves a certain measure of financial independence, and we have made proposals accordingly. It is true that the University will be mainly dependent on the Government for financial support. Apart from fees, the University at first at any rate, will have no resources of its own. But we confess to a desire to see it vested with financial control over the grant which it receives from Government as well as over its other receipts. If we may be permitted to employ a simile, the Government should regard the University as a business concern, of which it is a shareholder with a seat on the Board of Directors rather than as a servant to whom it makes certain payments, the disposal of which must be checked frequently and in detail.

"We recommend that the administration of the University be vested in a Chancellor, Vice-Chancellor, Senate and Syndicate. The Chief Commissioner of the Province will be the Chancellor. The Vice-Chancellor will be an honorary officer nominated by the Chancellor. The Senate will be the supreme authority, subject to the general control of the Government. It will be a body of 75 members, consisting partly of representatives of Government and of the general public, partly of elected representatives of the graduates and partly of teachers of the University and the constituent colleges, the latter being nominated by the Chancellor. The Syndicate will be the executive of the University, and will consist of the Vice-Chancellor, the Director of Public Instruction, a member of the Senate nominated by the Chancellor, four Principals of colleges, the Deans of the Faculties, and three members elected by the Senate from among their own number, of whom not more than one shall be a member of the teaching staff. The Chancellor's nominee on the Syndicate should be a person possessed of general administrative experience. In both these bodies the members of the teaching staff will predominate.

"After careful consideration, we have arrived at the conclusion that a university possessing the wide administrative and educational powers which we propose must be governed by a body in which professional and expert opinion will predominate. This we think we have secured by giving the members of the teaching staff a predominant voice in the counsels of the University.

"We recommend that the University shall contain, at its inception, Faculties of Arts, Law and Science, and a department for the training of teachers subordinate to the Faculty of Arts. We have considered the question of establishing a Faculty of Agriculture. But in view of the necessity which the Government Department of Agriculture feels of pursuing a tentative policy for some years to come with regard to agricultural education, we feel that it would be inadvisable at the present juncture to suggest that the University should make provision for instruction in this branch knowledge. As to the Medical and Engineering

Schools, they are designed to meet certain special needs, and do not aim at providing courses of a university standard. It will be many years before the demand for higher courses will justify the establishment of Faculties in Medicine and Engineering."

Until recent years, the demand for education, primary or secondary, was satisfied by a few institutions in the larger towns, while in the whole of the rural districts primary education had to be pressed on an apathetic and even obstructive agricultural population. The new spirit of progress in recent years has quickened the public pulse and the efforts of Government to effect improved facilities have responded accordingly. Special grants from the Government of India, budget surpluses in recent years have largely been devoted to assisting the District Councils to overtake their arrears of primary school building. District Councils in general have allowed their zeal for education to carry them into programmes of development beyond their means.

Medical

The medical and sanitary services of the province are respectively controlled by an Inspector-General of Civil Hospitals and a Sanitary Commissioner, the latter being assisted by a Sanitary Engineer. The medical department has progressed along comparatively stereotyped lines. A striking advance has been made in recent years with urban sanitation. The principal medical institutions are the Mayo Memorial Hospital at Nagpur, opened in 1874, with accommodation for 80 in-patients, the Victoria Hospital at Jubbulpore, opened in 1886 and accommodating 64 in-patients, the Lady Dufferin Hospitals at Nagpur and Raipur and the Lady Elgin Hospital at Jubbulpore, these last three being for women and containing together accommodation for 64 in-patients. The province has two lunatic asylums, at Nagpur and Jubbulpore respectively. Vaccination is compulsory in some Municipal towns to which the Vaccination Act has been extended. The administration in 1913 sanctioned the opening of peripatetic dispensaries in unhealthy areas.

Administration

Chief Commissioner, Sir B. Robertson, KCSI, CIE, apptd 3rd Aug 1912

Personal Assistant, D G Watson.

Chief Secretary, J T Martan, MA, ICS

Registrar, R W Johnson

Secretary, Public Works Department, (Irrigation Branch) A J Wadley

Financial Commissioner, H A Crump

Commissioner of Settlements and Director of Land Records, H E Hemingway, ICS

BERAR

Commissioner, F G Sly, CSI

Members of Council

NOMINATED MEMBERS

Mr Henry Ashbrooke Crump, CSCI, ICS

„ Bertram Por Standen, CIE, ICS

„ John Thomas Martan, ICS

„ H F Ellwood Bell, BA, ICS

„ John Hullah, ICS

[illegible]

North-West Frontier Province.

The North-West Frontier Province, as its name denotes, is situated on the north-west frontier of the Indian Empire. It is in form an irregular strip of country lying north by east and south by west and may generally be described as the tract of country, north of Baluchistan, lying between the Indus and the Durand boundary line with Afghanistan. To the north it extends to the mountains of the Hindu Kush. From this range a long broken line of mountains runs almost due south, dividing the province from Afghanistan, until the Sulaiman Range eventually closes the south of the Province from Baluchistan. The greatest length of the province is 405 miles, its greatest breadth 279 miles and its total area about 39,000 square miles. The territory falls into three main geographical divisions: the Cis-Indus district of Hazara, the narrow strip between the Indus and the Hills, containing the Districts of Peshawar, Kohat, Banu and Dera Ismail Khan, and the rugged mountainous regions on the north and west between those districts and the border line of Afghanistan. Hazara and the four districts in the second division contain 13,418 square miles. The mountain regions, north and west, are occupied by tribes subject only to the political control of the Chief Commissioner in his capacity as Agent to the Governor-General. The area of this tract is roughly 25,500 square miles and in it are situated, from north to south, the political agencies severally known as the Malakand, Khyber, Kurram, Tochi and Wana Agencies. Each of the Deputy Commissioners of the five administered districts is responsible for the management of political relations with certain tribes or sections of the tribes across the frontier. A few hundred miles of the trans-border Territory are internally administered by the Political Agents, but the bulk of the trans-border population is free from any internal interference, so long as offences are not committed and so long as the tribes observe the conditions on which allowances are paid to many of them.

The area of the Province is a little more than half that of Bombay (excluding Sind and Aden) and amounts to more than three-fifths of the size of England without Wales. The density of population throughout the Province equals 98 persons to a square mile, but in the more favoured portions the pressure of population is much greater. In the Hazara District there are 207 persons to a square mile and in the trans-Indus plains tract the number is 152. The key to the history of the people of the N-W-F-P lies in the recognition of the fact that the valley of Peshawar was always more closely connected politically with Eastern Iran than with India, though in pre-Mahomedan times its population was mainly Indian by race. Early history finds the Iranians dominating the whole Indus valley. Then came the Greek invasion under Alexander the Great, in B.C. 327, then the invasions of the Sakas, and of the White Huns, and later, the two great waves of Muhammadan invasion. Last came the Sikh invasion, beginning in 1818. The Frontier Territory was annexed by the British in 1849 and placed under the control of the Punjab Government. Frequent

warfare occurred with the border tribes, but since the conclusion of peace with the Afridis in 1898, the whole border has been undisturbed except for the expedition against the Zakka Khel Afridis in 1908.

The division of the Frontier Province from the Punjab was frequently discussed, with the double object of securing closer and more immediate control and supervision of the Frontier by the Supreme Government and of making such alterations in the personnel and duties of frontier officials as would tend to the establishment of improved relations between the local British representatives and the independent tribesmen. The province was eventually removed from the control of the Punjab administration in 1901. To it was added the political charge of Dir, Swat and Chitral, the Political Agent of which had never been subordinate to the Punjab. The new Province was constituted under a Chief Commissioner and Agent to the Governor-General, with headquarters at Peshawar, in direct communication with the Government of India in the Foreign Department. In political questions there is no intermediary between the Chief Commissioner and the local officer, an arrangement designed to secure both prompt disposal of references and the utilisation of the expert knowledge of frontier conditions for which the head of the administration is selected.

The People

The total population of the N-W-F-P (1911) is 3,819,027, made up as follows—

Hazara	603,028
Trans-Indus Districts	1,593,905
Trans-Border Area	1,622,094

This last figure is estimated. There are only 625 6 females per 1,000 males in the towns and 900 females per 1,000 males in rural areas. This disproportion of the sexes cannot at present be explained in the N-W-F-P any more than in other parts of Northern India, where it also appears. The discrepancy is greater here than in any other Province of India. There is no ground for believing that the neglect of girls in infancy has any effect in causing the phenomenon. On the other hand the female population has to face many trials which are unknown to men. The evils of unskilled midwifery and early marriage are among them. Both the birth and death-rates of the Province are abnormally low. The birth rate in the administered districts, according to the last annual official reports, was 35.1 and the death-rate 33.3. There were 122.5 male births for every 100 females. It is recognised that in this matter, and in regard to population generally, the registration of females may be defective, inasmuch as the Pathans, for whatever reasons, regards the birth of a daughter as a misfortune, the less said about which the better. The population is naturally increasing, but emigration reduces the net result.

The dominant language of the Province is Pashtu, and the population contains several linguistic strata. The most important sections of the population, both numerically and by social position, are the Pathans. They own

North-West Frontier Province

71

Area of the Province 122,611 sq. miles (18,900 sq. miles). The Province is bounded on the north by the Indian Empire, on the east by the Punjab, on the south by the Baluchistan, and on the west by the Afghanistan. The highest point is Kachin Peak (25,426 ft.), all in the Hindu Kush, on the northern border of Chitral Agency.

Trade and Occupations

The Province is almost entirely agricultural. The main occupations are the raising of wheat, barley, and other cereals, and the raising of sheep and goats. The Province is also famous for its silk and cotton. The main trade routes are the Karakoram, the Hindu Kush, and the Sulaiman Range. The Province is also famous for its handicrafts, such as carpets, shawls, and silks.

The climate of the Province is generally dry and hot, with a maximum temperature of 100° F. and a minimum of 40° F. The rainfall is generally light, with an average of 10 inches per year. The Province is also famous for its mountains, which are generally covered with snow. The main rivers are the Indus, the Jhelum, and the Ravi. The Province is also famous for its lakes, such as the Dal Lake and the Nainital Lake.

The Province is also famous for its forests, which are generally covered with pine, deodar, and other trees. The Province is also famous for its game, such as tigers, leopards, and bears. The Province is also famous for its minerals, such as coal, iron, and copper. The Province is also famous for its handicrafts, such as carpets, shawls, and silks.

The Province is also famous for its education, which is generally high. The Province is also famous for its health, which is generally good. The Province is also famous for its culture, which is generally rich. The Province is also famous for its history, which is generally long. The Province is also famous for its geography, which is generally varied.

The Province is also famous for its economy, which is generally strong. The Province is also famous for its politics, which is generally stable. The Province is also famous for its social life, which is generally vibrant. The Province is also famous for its art and literature, which is generally rich. The Province is also famous for its science and technology, which is generally advanced.

The Province is also famous for its environment, which is generally beautiful. The Province is also famous for its wildlife, which is generally diverse. The Province is also famous for its climate, which is generally pleasant. The Province is also famous for its scenery, which is generally magnificent. The Province is also famous for its people, which is generally friendly.

The administration of the North-West Frontier Province is conducted by the Chief Commissioner.

Commissioner and Agent to the Governor-General in Council His staff consists of—

- (1) Officers of the Political Department of the Government of India
- (2) Members of the Provincial Civil Service
- (3) Members of the Subordinate Civil Service
- (4) Superintendents and Assistant Superintendents of Police
- (5) Officers recruited for the service of departments requiring special knowledge—Militia, Engineering, Education, Medicine and Forestry

The cadre posts reserved for officers coming under the first head above are —

Administration	Chief Commissioner & Agent to the Governor-General	5
	Secretary	
	Assistant Secretary	
	Personal Assistant	
	Revenue Commissioner and Revenue Secretary	1
	Resident in Waziristan	
	Deputy Commissioners	5
	Political Agents	4
	District Judges	2
	Assistant Commissioners and Assistant Political Agents	12
High Court and Divisional Judges	One Judicial Commissioner	3
	Two Divisional and Sessions Judges	

The districts under the Deputy Commissioners are divided into from two to five sub-collectorates, in charge of tahsildars, who are invested with criminal and civil and revenue powers, and are assisted by naib-tahsildars, who exercise only criminal and revenue powers. Some sub-divisions are in charge of Assistant or Extra Assistant Commissioners. The village community characteristic of some parts of India is not indigenous among the Pathans. Its place as a social unit is to some extent taken by the tribe, which is held together by the ties of kinship and ancient ancestry, real or imaginary. Modern municipal local government has been introduced in the towns. There are also district boards. The district is the unit for police, medical and educational administration and the ordinary staff includes a District Superintendent of Police, a Civil Surgeon, who is also the Superintendent of Jail and a District Inspector of Schools. The Province forms a single educational circle and only possesses one forest division, that of Hazara. There are four divisions of the Roads and Building Branch of the Public Works Department, each under an Executive Engineer. The Irrigation Department of the P W D is in charge

of the Chief Engineer, Irrigation, Punjab, who is also *ex-officio* Secretary to the Chief Commissioner. The administration of the civil police force of the districts is vested in an Inspector-General. There is a special force of Border military police. The revenue and expenditure of the Province are wholly Imperial. Of the Agencies only Kurram and Tochi Valley pay land revenue to the British Government. The revenue administration of all five administered districts is controlled by the Revenue Commissioner. For the administration of civil and criminal justice there are two Civil and Sessions divisions, each presided over by a Divisional and Sessions Judge. The Judicial Commissioner is the controlling authority in the Judicial branch of the administration, and his Court is the highest criminal and appellate tribunal in this Province. The principal officers in the present Administration are —

Agent to Governor-General and Chief Commissioner, Lieut-Col Sir G O Roos-Keppel, K O S I, K C I E, assumed charge, 4th June 1908

Resident, Waziristan, Sir J S Donald, C S I, K O I E

Judicial Commissioner, W P Barton, C I E, I O S

Revenue Commissioner, Lieut-Col D B Blake-way, C I E, I A

Secretary to Chief Commissioner, E H Kealy
Asst Secretary to Chief Commissioner, G Latimer

Indian Personal Asst to Chief Commissioner, Risaldar Moghal Baz Khan

Inspecting Officer, Frontier Corps, Lieut-Col J S Kembell, I A

Secretaries, Public Works Department, Col W J D Dundee, C I E, F W Carue

Agency Surgeon and Administrative Medical Officer, Lieut-Col T W Irvine, I M S

Divisional and Sessions Judges, Lieut-Col C F Minchin, D S O, I A, F P Rennie.

Political Agents

Major W J Keen, I A, Dir, Swat & Chitral
S E Pears, Khyber
J A O Fitzpatrick, Tochi

Major R Garratt, I A, Kurram

Inspector-General of Police, H A Close

Director of Public Instruction, J A Richey, M A
Superintendent, Archaeological Survey, Sir M A Stein, K O I E, F R S, D LITT D S O

Former Chief Commissioners

Lieut-Col H A Deane, C S I Died 7th July 1908

W R H Merk, C S I Officiating to 31st Oct 1910

The Province of Assam 61,682 square miles in area, includes the Assam Valley Division, the Surma Valley and Hills Division and the State of Manipur. It owes its importance to its situation on the north-east frontier of India. It is surrounded by mountainous ranges on three sides while on the fourth (the west) lies the Province of Bengal on to the plains of which it debouches the two valleys of the Brahmaputra and the Surma which form the plains of Assam. The two valleys are separated from each other by the Assam Range, which runs westward from the hills on the eastern border.

Population

The total population of the province in 1911 was 7,098,857 of whom 11 millions were Male and 21 millions Hindus and 11 millions Muslims. 40 per cent of the population speak Bengali 22 per cent speak Assamese. Other languages spoken in the province are Hindi Urdu and a great variety of languages classified under the general heading of the Tibeto-Chinese language. Owing to the great areas of waste and rivers the density of the province is only 115, which compared with that of most other parts of India, is low, but is more than double that of Burma.

Agricultural Products

It has agricultural advantages for which it would be difficult to find a parallel in any part of India. Climate, soil, rainfall and river systems all being alike favourable to cultivation. Rice is the staple food crop about 4 million acres being devoted to this crop. Except in the Himalayan Tract irrigation is unnecessary. Jute and tea are the most important crops grown for export, the area under jute being generally about 40,000 acres, that under tea about 76,000 acres. In 1914 the total number of tea gardens was 712 the production being estimated at 208,227,000 lbs. Wheat and tobacco are also grown and about 10 square miles are devoted to sugarcane. The total area of 'reserved' forest is about 3,778 square miles and the unclassified state forests cover about 18,709 square miles.

Meteorological Conditions

Rainfall is everywhere abundant, and ranges from 93 to 124 inches. The maximum is reached at Cherrapunji in the Khasi Hills, which is one of the wettest places in the world, having a rainfall of 455 inches. The temperature ranges from 59° at Sibsagar in January to 84° in July. Earthquakes of considerable severity have taken place, by far the worst being that which occurred in 1807.

Land Tenures

Most of the actual cultivators of the soil usually hold direct from the State, and the area of land on which rent is paid is inconsiderable. A large part of Goalpara and of the more densely populated portions of Sylhet was however included in the permanent settlement of Bengal, and the system of land tenure in Cachar, and the existence of large estates on privileged rates of revenue in Kamrup have tended to produce a tenant class which at the 1901 census amounted to more than one-third of the total number of persons supported by agriculture. In the 1911 census a very marked

increase in tenancy throughout the Province is shown.

The Assam Labour and Emigration (Amendment) Bill was passed on the 24th March 1915. The Act carries with it the abolition of the recruiting contractor and the creation of a Labour Bureau to supervise recruiting.

Mines and Minerals

The only minerals in Assam worked on a commercial scale are coal, limestone and petroleum oil. The most extensive coal measures are in the Naga Hills district where about 300,000 tons are raised annually and used mainly by the river steamers. There has been a very marked rise in recent years in the price of Assam coal which rose from under Rs. 5 per ton in 1912 to Rs. 7 in 1914. Limestone is quarried in the Khasi and Jaintia Hills, in Sylhet and in the Garo hills, 108,131 tons were quarried in 1914. Petroleum is worked only in Lakhimpur, the oil is rich in paraffin, and the chief products are light naphthas, kerosene and wax. The oil is sold locally, and the wax is exported, mainly to England. Lubricating oil is produced on the southern slopes of the Khasi Hills. The total output of oil from the wells was in 1914, over 4,688,000 gallons valued at Rs. 2,31,990.

An account of the petroleum occurrences in Assam was recently published in the memoirs of the Geological Survey of India. It states that the petroleum localities in this province are confined to a curved belt of country along the basins of the Brahmaputra and Surma. This belt is traceable over a distance of some 800 miles from N.E. Assam through Kachar and Chittagong to the Arakan coast, where it has a S.S.W. trend. It is roughly concentric with the trend of the Burmese oil belt, the distance between the two varying from 70 to 150 miles. Various parts of the Assam-Kachar-Chittagong-Arakan belt have been exploited in a primitive way, but there are only two properly worked fields of commercial importance, viz., those of Digboi and Bappa Pung two localities only about a mile apart in N.E. Assam.

Manufactures

Silk is manufactured in the Assam Valley, the weaving being done by the women. Cotton weaving is also largely practised by the women, and almost every house contains a loom, the cloth is being gradually displaced by imported goods of finer texture and colour. Boat building, brass and metal and earthenwares, tea manufacture and limestone burning are the other industries apart from agriculture, which itself employs about 84 per cent of the population. Assam carries on a considerable trade with the adjoining foreign tribes and countries. In 1913-14 the value of frontier trade registered was nearly Rs. 35 lakhs. Trade with Bhutan increased but imports from all other hill tribes decreased mainly owing to the discontinuance of returns of imported rubber.

Communications

The trade of Assam is chiefly carried by river, but increasing use is being made of the Assam Bengal Railway which runs from the port of Chittagong to Silchar at the eastern

end of the Surma Valley. A branch of that line runs along the south of the Assam Valley from Gauhati to Tinsukia, a station on the Dibru-Sadiya Railway, and is connected with the Surma Valley branch by a line that pierces the North Cachar Hills, the points of junction being Lumding in the northern and Badarpur in the southern valley. The Eastern Bengal State Railway connects Assam with the Bengal system via the valley of the Brahmaputra. The excellence of its water communication makes Assam less dependent upon roads than other parts of India, but in recent years the road system has been developed and there is a trunk road through the whole length of the Brahmaputra Valley and an excellent road from Gauhati to Shillong. A large fleet of steamers maintained by the India General Steam Navigation Company and the Rivers Steam Navigation Company plies on the rivers of both valleys. A daily service of passenger boats runs from Goalundo to Dibrugarh.

Finance

Gross receipts in 1913-14 rose from Rs 1,69,42,636 to Rs 1,70,04,311 and gross expenditure from Rs 1,41,18,765 to Rs 1,86,79,558. The provincial account opened with a balance of Rs 78,06,494 which included Imperial assignments for various purposes aggregating Rs 48,55,000. Receipts amounted to Rs 1,60,26,700, and expenditure to Rs 1,82,96,971. Further Imperial assignments, amounting to Rs 5,13,000, were received during the year and, with the unspent balance of the former assignments, accounted for Rs 36,93,000 out of the closing balance of Rs 55,36,223.

Education

The latest census report shows that there are in the Province at present 4,118 educational institutions including two Arts Colleges with 168,250 pupils. Of the total population 333,672 are returned as literate. The distribution of literacy naturally varies considerably throughout the Province. The large number of immigrant coolies and of aboriginal tribes tends to lower the proportion of literates in the Brahmaputra Valley, and a comparatively high standard of literacy in the Hills is due mainly to the progress of education amongst the Khasis of whom a large proportion have been converted to Christianity. Amongst the Animists in the Hills the Lushais seem to have an extraordinary keenness for learning, which is the more remarkable, because the administration of their district dates from quite recent times. There are 4,578 public and private educational institutions, with 215,141 pupils, in the province.

Administration

The province of Assam was originally formed in 1874 in order to relieve the Lieutenant-Governor of Bengal of part of the administration of the huge territory then under him. In 1903, as the result of further deliberations, it was decided to add to the small Province of Assam the eastern portion of its unwieldy neighbour and to consolidate those territories under a Lieutenant-Governor. The Province of Eastern Bengal and Assam as then constituted was again broken up on the 1st of April, 1912, the Eastern Bengal Districts

were united with the Bengal Commissionerships of Burdwan and the Presidency to form the Presidency of Bengal under a Governor in Council. Bilhar, Chota Nagpur and Orissa were formed into a separate province, while the old Province of Assam was re-constituted under a Chief Commissioner.

The capital is Shillong, a town laid out with great taste and judgment among the pine woods on the slopes of the Shillong Range which rises to a height of 6,450 feet above the sea. It was destroyed in the earthquake of 1897 and has been rebuilt in a way more likely to withstand the shocks of earthquake.

Chief Commissioner, Sir Archdale Earle, F.C.I.E.
appointed 1st April, 1912
Personal Asst R (R Cumming)
Chief Secretary, B. C. Allen
Second Secretary, A. W. Botham
Secretary, Public Works Department, F. O. Oertel
Officiating Inspector General of Registration — S. N. Mackenzie, I.C.S.
Judges, F. J. Jeffries, J. F. Graham
Director of Public Instruction, J. R. Cunningham
Inspector-General of Police, Lt.-Col. A. E. Woods
Sanitary Commissioner, Major T. C. M. Young, M.B.E.
Comptroller, Financial Department, W. A. T. (redundant)
Political Agent in Mampur, Lt.-Col. H. W. G. Cole, C.S.I.
Superintendent and Remembrancer of Legal Affairs — Abdul Majid, B.A.
Director of Land Records and Agriculture, A. R. Edwards, B.A., I.C.S.
Superintendent, Archaeological Survey, Eastern Circle, D. B. Spooner
Chief Inspector of Factories, R. P. Adams

LEGISLATIVE COUNCIL

F. O. Oertel, W. J. Reid, Lieut. Colonel D. Herbert, J. R. Cunningham, M.A., J. F. Graham, Abdul Majid, A. B. Hawkins, Raja Prabhakar Chandra Barua, Ramani Mohan Das, Srijit Padmanath Barua, Col. H. E. Banerjee, B. C. Allen, A. W. Botham.

Elected Members

Mr. C. L. Pringle, Maulvi Saifud Abdul Majid, Khan Bahadur, Maulvi Saifud Muhammad Sardulla Babu Nelini Kanta Ray Dastidar, Rai Bahadur Mr. Tarun Ram Phukan, Mr. Kamini Kumar Chanda, Sita Mohan Das Rai Bahadur, Mr. A. L. Playfair, Mr. H. Miller, Mr. H. B. Fox.

Chief Commissioners of Assam

Colonel R. H. Keatinge, C.S.I.	1874
Sir S. C. Bayley, K.C.S.I.	1878
C. A. Elliot, C.S.I.	1881
W. E. Ward	1886
Dennis Fitzpatrick, C.S.I.	1887
J. Westland, C.S.I.	1887
J. W. Quinton, C.S.I.	1889
Brig.-General Sir H. Collett, K.C.B.	1891
W. E. Ward, C.S.I.	1891
C. J. Hall, C.S.I.	1894
H. J. S. Cotton, C.S.I.	1896
J. B. Fuller, C.I.E.	1900
J. B. Fuller, C.I.E.	1902
C. W. Bolton, C.I.E.	1903
<i>Note</i> — The Chief Commissionership of Assam was revived 1st April, 1912.	
Sir Archdale Earle, F.C.I.E.	1912

Assistant Political Agent, Kalat and Bolan Pass,
C H Gidney, I C S

Assistant for Mekran to the Political Agent in
Kalat and, ex-officio Commandant, Mekran
Levy Corps, Captain S Williams, I A

Political Agent, and Deputy Commissioner,
Quetta and Pishin, Lieut-Colonel A McCona-
ghey, O I E

Assistant Political Agent and Assistant Commissioner, Quetta and Pishin, Major H B Sh John, C I E, I A

Political Agent, Chagai, Major W G Hutchinson,
IA

Political Agent and Deputy Commissioner, Sibi,
Major F McConahey

Assistant Political Agent, Sibi, Major C E
Bruce, I A

Political Agent, Loralai, Major A D G
Ramsay

Assistant Political Agent, Loralai, Vacant

Residency Surgeon and Chief Medical Officer,
Duke, Lieut-Colonel A L, I M S

Civil Surgeon, Quetta, Major W V Anderson

ANDAMAN AND NICOBAR ISLANDS.

This is a group of islands in the Bay of Bengal of which the headquarters are at Port Blair, by sea 780 miles from Calcutta, 740 miles from Madras and 360 miles from Rangoon, with which ports there is regular communication

The land area of the islands under the administration is 3,143 square miles, namely, 1,508 square miles in the Andamans and 635 square miles in the Nicobars. The total population of the islands was returned in the census of 1911 as 26,459. The Islands are administered by the Chief Commissioner of the Andaman and Nicobar Islands who is also the Superintendent of the Penal Settlement. The penal settlement, which was established in 1858, is the most important in India.

Superintendent of Port Blair, Lieut-Col M W
Douglas, CIE

Commandant and District Superintendent of
Military Police, Captain H W Rowlandson

Medical Superintendent of Iqals, and
Senior Medical Officer, Major J. H.
Murray, I M S

CQORGc

Coorg is a small petty Province in Southern India west of the State of Mysore. Its area is 1,582 square miles and its population 174,976. Coorg came under the direct protection of the British Government during the war with Sultan Tipu of Seringapatam. In May 1834, owing to misgovernment, it was annexed. The Province is directly under the Government of India and administered by the Chief Commissioner of Coorg who is the Resident in Mysore with his headquarters at Bangalore. In him are combined all the functions of a local government and a High Court. The Secretariat is at Bangalore where the Assistant Resident is styled Secretary to the Chief Commissioner of Coorg. In Coorg his chief authority is the Commissioner whose headquarters are at Mercara and whose duties extend to every branch of the administration. The chief wealth of the country is agriculture and especially the growth of coffee. Although owing to over-production and insect pests coffee no longer commands the profits it once enjoyed, the Indian output still holds its own against the severe competition of Brazil. The bulk of the output is exported to France.

Resident and Chief Commissioner, Coorg,
The Hon Lt-Col Sir Hugh Daly, K C I E

AJMER-MERWARA.

Ajmer-Merwara is an isolated British Province in Rajputana. The Agent to the Governor-General in Rajputana administers it as Chief Commissioner. The Province consists of two small separate districts, Ajmer and Merwara, with a total area of 2,711 square miles and a population of 501,395. At the close of the Pindari war Daulat Rao Scindia, by a treaty dated June 25, 1818, ceded the district to the British. Fifty-five per cent of the population are supported by agriculture, the industrial population being principally employed in the cotton and other industries. The principal crops are maize, millet, barley, cotton, oil-seeds and wheat.

Agent to the Governor-General in⁶ Rajputana
and Chief Commissioner of Ajmer-Merwara,
The Hon. Lieut-Col Sir E G Colvin, K.C.S.I.

Aden was the first new territory added to the Empire after the accession of Queen Victoria. It was acquired in 1839, was the outcome of an enterprise commended by the local Pashah chief of the Persians and crew of a British bugle, who was killed in the neighbourhood. Various acts of treachery supervened during the negotiations, and after the bungling outrage and Aden was captured by a force sent by the Bombay Government under Major Pailin. The act has been justified as one of those opportunist political strokes which have given geographical continuity to British possessions scattered over the world.

Aden is an extinct volcano five miles long and three broad, but it is not so much as Gibraltar. It has a circumference of about 15 miles and is connected with the mainland by a narrow isthmus of flat ground. This is nearly covered at one part at high spring tides, but the causeway and aqueduct are always above, though some times only just above water. The highest part of the wall of precipitous hills that surround the old crater which constitutes Aden is 177 feet above sea level. Round a spur with walls between a radiate from the centre to the circumferential rim of the crater. A great gap has been cut by some volcanic disturbance on the surface of the circle of hills and this opens to the magnificent harbour. The peninsula of Little Aden, adjacent to Aden proper, was obtained by purchase in 1861 and the adjoining tract of Shukh Othman, 9 square miles in extent, was subsequently purchased when in 1882 it was found necessary to make provision for an ever flowing population.

Attached to the settlement of Aden are the islands of Perim an island of 5 square miles, extent in the Straits of Bab-el Mandeb, in the entrance to the Arabian Sea, Sokatra Island, at the entrance to the Gulf of Aden, in the Arabian Sea, acquired by treaty in 1856 and 1,882 miles in extent, and the five small Kuria Kuria Islands, ceded by the Imam of Maskat in 1851 for the purpose of landing the Red Sea cable, and otherwise valuable only for the guano deposits found upon them. They are off the Arabian coast about two thirds of the way from Aden to Maskat. The whole extent of the Aden settlement including Aden, Little Aden, Shukh Othman and Perim is approximately 80 miles. The 1911 census shows Aden, with Little Aden, Shukh Othman, and Perim to have a population of 40,165. The population of Perim is a matter of a few hundreds, largely dependent on the Coal Depot maintained there by a commercial firm. That of Sokatra is 12,000, mostly pastoral and migratory inland, fishing on the coast.

Strategic Importance

Aden's first importance is as a naval and military station of strategic importance. This aspect was fully discussed by Colonel A. M. Murray, in his "Imperial Outposts." He points out that Aden is not a naval base in the same sense that Gibraltar, Malta and Hong Kong were made, but a *point d'appui*, a rendezvous and striding point for the fleet. It was seized in 1839 because of its usefulness as a harbour of refuge for British ships and from a strategist's point of view this is its primary purpose and the *raison d'être* of its forts and garrison. Aden

under British rule has retained its ancient prestige as a fortress of impregnable strength, invulnerable by sea and by land, dominating the entrance to the Red Sea, and valuable to its owners as a commercial emporium, a port of call and a cable centre. The harbour extends 8 miles from east to west and 4 from north to south and is divided into two bays by a spit of land. The depth of water in the western bay is from 3 to 4 fathoms across the entrance 4½ to 5 fathoms, with 10 to 12 fathoms 2 miles outside. The bottom is sand and mud. There are several islands in the inner bay. Strategic control of the Red Sea was rendered complete by the annexation of Perim and Sokatra, which may both be regarded as outposts of Aden, and are under the political jurisdiction of the Resident.

The Arab chiefs of the hinterland of Arabia are nearly all stipendiaries of the British Government. Colonel Wahab and Mr G. H. Fitzmaurice of the Constantinople Embassy, were appointed in 1902 as Commissioners to delimitate the frontier between Turkish Arabia and the British protectorate around Aden. A convention was signed in 1905 settling details, the frontier line being drawn from Shaikh Murad, a point on the Red Sea coast opposite Perim, to the bank of the river Bana, the eastern limit of Lurich claims, at a point some 29 miles north-east of Dthala and thence north-east to the great desert. The area left within the British Protectorate was about 9,000 square miles. The arrangement gave to Turkey Cape Bab-el Mandeb which forms the Arabian bank of the eastern channel past Perim into the Red Sea. England took this gatepost of the Red Sea from the Turks in November 1914. A sanatorium and small British garrison used to be maintained at Dthala, which is 7,700 feet high, but the garrison was withdrawn in 1906, Lord Morley explaining this step as being in accordance with the policy stated in the House of Lords in 1903,—that His Majesty's Government had never desired to interfere with the internal and domestic affairs of the tribes on the British side of the boundary, but had throughout made it plain that they would not assent to the interference of any other Power with those affairs.

British Policy

There has been much criticism of a policy under which Aden has failed to advance with the same progressive strides which have marked the development of other British dependencies. It is said that the former Persian possessors of Aden built its wonderful water tanks, and the Arabs made an aqueduct 20 miles long, while the British have done nothing except mount guns to protect their coal yards. Trade, it is argued, flourishes because this is a natural emporium of commerce, but not because of the attention its needs get from Government. Lord Roberts, writing on this point a few years ago said, "It is not creditable to British rule to make use of a dependency like Aden for selfish purposes of political necessity without attempting to extend the benefits of civilised Government to the neighbouring native tribes, especially when those tribes are living under the aegis of the British Crown." The Persians, the Turks and even the Arabs did more for Aden in

their time than we have done during our seventy years' occupation. Aden has always suffered under the disadvantage of being an appanage of the Bombay Presidency, with which it has neither geographical, racial nor political affinity. Probably the best solution of the matter would be to hand over the place to the Colonial Office, relieving the Government of Bombay of a charge which is only looked upon as an incubus. Some important steps have been taken in the past few years to satisfy the commercial needs of the port.

Trade

The trade of Aden has developed immensely since British acquisition in 1839, largely through the Government of India declaring it a free port in 1850, since when it has attracted much of the valuable trade between Arabia and Africa, formerly monopolised by the Red Sea ports of Hodeida and Mokha. The opening of the Suez Canal was also responsible for a large increase of trade through Aden into the interior. The total imports by sea in the last official year (1913-14) before the war set the course of progress awry amounted to £3,756,964, by land £170,213, treasure, £450,305, exports by sea were £3,267,283, by land, £140,159, treasure, £741,687. These statistics are exclusive of Government stores and treasure.

The language of the settlement is Arabic, but several other Asiatic tongues are spoken. The population is chiefly returned as Arabs and Shaikhs. The Somalis from the African coast and Arabs do the hard labour of the port. So far as the settlement is concerned there are no products whatever, with the important exception of salt. The crops of the tribal low country joining are jowar, sesamum, a little cotton, madder, a bastard saffron and a little indigo. In the hills, wheat, madder, fruit, coffee and a considerable quantity of wax and honey are obtained. The water supply forms the most important problem. Water is drawn from four sources—wells, aqueducts, tanks or reservoirs and condensers.

Administration

The Aden settlement is subject politically to the Government of Bombay and its administration is conducted by a Resident, who is assisted by four Assistants. The Resident is also military Commandant and is usually an officer selected from the Indian army, as are his assistants. The Resident has jurisdiction as a Judge of the Vice-Admiralty Court in matters connected with slave trading, his court being called the Colonial Court of the Admiralty. The laws in force in the settlement are generally speaking those in force in the Bombay Presidency, supplemented on certain points by special regulations to suit local conditions. The management of the port is under the control of a Board of Trustees formed in 1888. The principal business of the Port Trust has been the deepening of the harbour, so as to allow vessels of all sizes to enter and leave at all states of the tide. The

Aden police force numbers slightly over 200 men. There are hospitals, and dispensaries in both Aden and Perim, in addition to the military institutions of this character. The garrison comprises a troop of engineers, three companies of garrison artillery, one battalion of British infantry, two companies of sappers and miners and one Indian regiment. Detachments from the last named are maintained at Perim and Shaikh Othman respectively.

The average temperature of the station is 87 degrees in the shade, the mean range being from 75 in January to 98 in June, with variations up to 102. The lulls between the monsoons, in May and September are very oppressive. Consequently, long residence impairs the faculties and undermines the constitution of Europeans and even Indians suffer from the effects of too long an abode in the settlement, and troops are not posted in the station for long periods, being usually sent there one year and relieved the next. But Aden is exceptionally free from infectious diseases and epidemics, and the absence of vegetation, the dryness of the soil and the purity of the drinking water constitute efficient safeguards against many maladies common to tropical countries. The annual rainfall varies from $\frac{1}{2}$ inch to 8 $\frac{1}{2}$ inches, with an irregular average of 3 inches.

At the outset of the war the Turks established themselves on the Arabian shore of the straits of Babel Mandeb. They were driven off, their fort captured and then guns taken, by a force landed from a British warship. But in July last year a mixed force of Turks and Arabs advanced against the Aden Settlement. News was made known in India by a Reuter telegram of July 9th, which said that the Turks and Arabs threatened Lahej, that at the request of the Sultan of Lahej a force was sent for the protection of his capital, and that the supporting force was so beset with water and transport difficulties that it was decided to retire, and the whole force withdrew to Aden, the enemy declining to follow. Subsequently came an official intimation that the Sultan of Lahej who had been grievously wounded in a fight against the raiding force had died in Aden whither he had been taken for surgical treatment. The Government of India announced on July 22nd, that on the morning of the 21st instant a force from the Aden Garrison attacked the position taken by the Turks, a few miles outside the settlement, and drove them from it, the pursuit being continued for a distance of five miles.

The following are the principal officers of the present administration—

Political Resident, Brig-General C. H. K. Price, C.B., D.S.O.

Assistant Residents, Lieut-Colonel M. T. Elderton (Perim), Lieut-Colonel H. F. Jacob, Lieut-Colonel J. K. Condon, (on furlough) Captain B. R. Reilly, Lieut-Colonel W. Beale, Capt. A. H. A. Mosse.

The area enclosed within the boundaries of India is 1,778,108 square miles, with a population of 316,132,537 of people—nearly one-fifth of the human race. But of this total a very large part is not under British Administration. The area covered in the Native States is 675,267 square miles with a population of seventy millions. The Native States embrace the widest variety of country and jurisdiction. They vary in size from petty states like Lawa, in Rajputana, with an area of 19 square miles, and the Simla Hill States, which are little more than small holdings, to States like Hyderabad, as large as Italy, with a population of thirteen millions. They include the inhospitable regions of Western Rajputana, Baroda, part of the Garden of India, Mysore, rich in agricultural wealth, and Kashmir, one of the most favoured spots on the face of the globe. In the case of 175 States control is exercised by the Government of India, and of about 500 by the Provincial Governments. The four principal states, Hyderabad, Mysore, Baroda and Kashmir, are in direct relation with the Government of India. The other States are grouped under the direction of an Agent to the Governor-General, as for Rajputana and Central India, in one case the Provincial Government has been compelled to group its States, those of Kathlawar, under an Agent to the Governor.

Relations with the Paramount Power

So diverse are the conditions under which the Native States were established and came into political relation with the Government of India, that it is impossible even to summarise them. But broadly it may be said that as the British boundaries expanded, the states came under the influence of the Government and the rulers were confirmed in their possessions. To this general policy however there was, for a brief period, an important departure. During the regime of Lord Dalhousie the Government introduced what was called annexation through lapse. That is to say, when there was no direct heir, the Government considered whether public interests would be secured by granting the right of adoption. Through the application of this policy, the states of Satara and of Nagpur fell in to the East India Company, and the kingdom of Oudh was annexed because of the gross misgovernment of its rulers. Then came the Mutiny. It was followed by the transference of the dominions of the East India Company to the Crown, and an irrevocable declaration of policy toward the Native States. In the historic Proclamation of Queen Victoria it was set out that "We desire no extension of our present territorial possessions, and while we will permit no aggression on our dominions or our rights to be attempted with impunity, we shall allow no encroachments on those of others. We shall respect the rights, dignity and honour of the Native Princes as our own, and we desire that they, as well as our own subjects, should enjoy that prosperity and that social advancement which can only be secured by internal peace and good government." Since the issue of that proclamation there has been no encroachment on the area under Native rule by the Government of India. On the contrary, the movement has been in the op-

posite direction. In 1881 the State of Mysore, which had been so long under British administration that the traditions of Native rule were almost forgotten, was restored to the old Hindu ruling house. In 1911 the Maharajah of Benares, the great taluqdar of Oudh, was granted ruling powers over his extensive possessions. On many occasions the Government of India has had to intervene, to prevent gross misgovernment, or to carry on the administration during a long minority, but always with the undeviating intention of restoring the territories as soon as the necessity for intervention passed. Almost all states possess the right of adoption in default of heirs.

Rights of Native States

The rights and obligations of the Native States are thus described by the Imperial Gazetteer. The Chiefs have, without exception, gained protection against dangers from without and a guarantee that the protector will respect their rights as rulers. The Paramount Power acts for them in relation to foreign Powers and other Native States. The inhabitants of the Native States are the subjects of their rulers, and except in case of personal jurisdiction over British subjects, these rulers and their subjects are free from the control of the laws of British India. Criminals escaping to a Native State must be handed over to it by its authorities, they cannot be arrested by the police of British India without the permission of the ruler of the State. The Native Princes have therefore a suzerain power which acts for them in all external affairs, and at the same time scrupulously respects their internal authority. The suzerain also intervenes when the internal peace of their territories is seriously threatened. Finally they participate in all the benefits which the protecting power obtains by its diplomatic action, or by its administration of its own dominions, and thus secure a share in the commerce, the railways, the ports, and the markets of British India. Except in rare cases, applied to maritime states, they have freedom of trade with British India although they levy their own customs, and their subjects are admitted to most of the public offices of the British Government.

Obligations of Native States

On the other hand the Native States are under an obligation not to enter into relations with foreign nations or other states, the authority of their rulers has no existence outside their territories. Their subjects outside their dominions become for all intents and purposes British subjects. Where foreign interests are concerned, the Paramount Power must act so that no just cause of offence is given by its subordinate allies. All Native States alike are under an obligation to refer to the British every question of dispute with other states. Inasmuch as the Native States have no use for a military establishment other than for police, or display, or for co-operation with the Imperial Government, their military forces, their equipment and armament are prescribed by the Paramount Power. Although old and unaltered treaties declare that the British Government will have no manner of concern with any of a Maharajah's dependents or servants, with respect to whom the Maharajah is absolute, logic and public opinion

have endorsed the principle which Lord Canning set forth in his minute of 1860, that the "Government of India is not precluded from stepping in to set right such serious abuses in a Native Government as may threaten any part of the country with anarchy or disturbance, nor from assuming temporary charge of a Native State when there shall be sufficient reason to do so." Of this necessity the Governor-General in Council is the sole judge, subject to the control of Parliament. Where the law of British India confers jurisdiction over British subjects or other specified persons in foreign territory, that power is exercised by the British courts which possess it. The subjects of European Powers and the United States are on the same footing. Where cantonments exist in Native territory, jurisdiction both over the cantonment and the civil station is exercised by the suzerain power.

Political Officers

The powers of the British Government are exercised through Political Officers who as a rule reside in the states themselves. In the larger states the Government is represented by a Resident, in groups of states by an Agent to the Governor-General, assisted by local Residents or Political Agents. These officers form the sole channel of communication between the Native States and the Government of India and its Foreign Department, with the officials of British India and with other Native States. They are expected to advise and assist the Ruling Chiefs in any administrative or other matters on which they may be consulted. Political Agents are similarly employed in the larger States under the Provincial Governments, but in the petty states scattered over British India the duties of the Agent are usually entrusted to the Collector or Commissioner in whose district they lie. All questions relating to the Native States are under the special supervision of the Supreme Government, and in the personal charge of the Governor-General. A proposal has been made by the Government of India that, in view of the increasing importance of the Native States, an additional Secretary, styled the Political Secretary, shall be appointed who shall be in special charge, under the Viceroy, of these questions.

Closer Partnership

Events have tended gradually to draw the Paramount Power and the Native States into closer harmony. Special care has been devoted to the education of the sons of Ruling Chiefs, first by the employment of tutors, and afterwards by the establishment of special colleges for the purpose. These are now established at Ajmere, Rajkot, Indore and Lahore. The Imperial Cadet Corps whose headquarters are at Dehra Dun, imparts military training to the scions of the ruling chiefs and

noble families. The spread of higher education has placed at the disposal of the Native States the products of the Universities. In these ways there has been a steady rise in the character of the administration of the Native States, approximating more closely to the British ideal. Most of the Native States have also come forward to bear their share in the burden of Imperial defence. Following on the spontaneous offer of military assistance when war with Russia appeared to be inevitable over the *Pamir Incident* in 1885, the states have raised a portion of their forces up to the standard of the Native troops in the Indian Army. These are termed Imperial Service Troops, they belong to the states, they are officered by Indians, but they are inspected by a regular cadre of British officers, under the general direction of the Inspector-General of Imperial Service Troops. Their numbers are approximately 22,000 men, their armament is the same as that of the Indian Army and they have done good service often under their own Chiefs on the Frontier and in China and in Somaliland. Secure in the knowledge that the Paramount Power will respect their rights and privileges, the Ruling Chiefs have lost the suspicion which was common when their position was less assured, and the visits of the Prince of Wales in 1875, of the Prince and Princess of Wales in 1905-06, and of the King and Queen in 1911-12 have tended to seal the devotion of the great feudatories to the Crown. The improvement in the standard of native rule has also permitted the Government of India largely to reduce the degree of interference in the internal affairs of the Native States. The new policy was authoritatively laid down by Lord Minto, the then Viceroy, in a speech at Udaipur in 1909, when he said —

"Our policy is with rare exceptions, one of non interference in the internal affairs of the Native State. But in guaranteeing their internal independence and in undertaking their protection against external aggression it naturally follows that the Imperial Government has assumed a certain degree of responsibility for the general soundness of their administration and could not consent to incur the reproach of being an indirect instrument of misrule. There are also certain matters in which it is necessary for the Government of India to safeguard the interests of the community as a whole as well as those of the paramount power, such as railways, telegraphs and other services of an Imperial character. But the relationship of the Supreme Government to the State is one of suzerainty. The foundation-stone of the whole system is the recognition of identity of interests between the Imperial Government and Durbars and the minimum of interference with the latter in their own affairs."

HYDERABAD

Hyderabad, the premier Native State in India, is in the Deccan. Its area is 82,608 square miles and population 13,374,676. The general physical characteristics of the State are an elevated plateau, divided geographically and ethnologically by the Mahanadi and Godavari rivers. To the North-West is the Trappean region, peopled by Marathas, a country of black cotton soil,

producing wheat and cotton. To the South East is the granitic region of the Telugus and producing rice.

HISTORY—In pre-historic times Hyderabad came within the great Dravidian zone. The date of the Aryan conquest is obscure, but the dominions of Asoka 272 to 231 B.C. embraced the northern and western portions of the State.

Three great Hindu dynasties followed those of the Pallavas, Chalukyas and Yadavas. In 1294 the irruption of the Mahomedans under Ala-ud-din Khilji, commenced, and thenceforward till the time of Aurungzebe the history of the State is a confused story of struggles against the surviving Hindu kingdom of the South, and after the fall of Vijayanagar, with each other. Aurungzebe stamped out the remains of Mahomedan independence of the South and set up his General Asaf Jah of Turcoman descent as Viceroy, or Subhedar of the Deccan in 1713. In the chaos which followed the death of Aurungzebe, Asaf Jah had no difficulty in establishing and maintaining his independence, and thus founded the present House. During the struggle between the British and the French for mastery in India, the Nizam finally threw in his lot with the British, and unshaken even by the excitement of the mutiny, has been so staunch to his engagements as to earn the title of 'Our Faithful Ally'. The present ruler is H. H. Sir Usman Ali Khan Bahadur Fateh Jung, C.S.I.

THE BERARS—A most important event in the history of the State occurred in November 1902, when the Assigned Districts of Berar were leased in perpetuity to the British Government. These districts had been administered by the British Government on behalf of the Nizam since 1853, under the treaties of 1853 and 1860 there were "assigned" without limit of time to the British Government to provide for the maintenance of the Hyderabad contingent a body of troops kept by the British Government for the Nizam's use the surplus revenues if any, being payable to the Nizam. In course of time it had become apparent that the maintenance of the Hyderabad contingent on its old footing as a separate force was inexpedient and unnecessary, and that similarly the administration of Berar as a separate unit was very costly, while from the point of view of the Nizam, the precarious and fluctuating nature of the surplus was financially inconvenient. The agreement of 1902 re-affirmed His Highness' sovereignty over Berar, which instead of being indefinitely "assigned" to the Government of India, was leased in perpetuity to an annual rental of 25 lakhs (nearly £167,000), the rental is for the present charged with an annual debt towards the repayment of loans made by the Government of India. The Government of India were at the same time authorised to administer Berar in such manner as they might think desirable, and to redistribute, reduce, re-organise and control the Hyderabad Contingent, due provision being made, as stipulated in the treaty of 1853 for the protection of His Highness' dominions. In accordance with this agreement the Contingent ceased in March 1903 to be a separate force and was re-organised and redistributed as an integral part of the Indian Army, and in October 1903 Berar was transferred to the administration of the Chief Commissioner of the Central Provinces.

ADMINISTRATION—The Nizam is supreme to the State and exercises the power of life and death over his subjects. For convenience in administration the Minister is the chief controlling authority in the State. To assist him there are five Assistant Ministers: Financial, Judicial, Military, Public Works and Ecclesiastical. All questions of importance are referred to the

Council, which is composed of the Minister as President, and the Assistant Ministers as Members. Business disposed of by the Council is immediately reported to the Nizam. The actual work of the departments is done by six Secretaries. Below the Secretariat the State is divided into Subhs or Divisions, Districts and Talukas. Fifteen Districts, 86 Taluk and nine Divisional Boards are at work in the State. A Legislative Council, consisting of 21 members, of whom 13 are official and 8 non-official, is responsible for making laws. The State maintains its own currency, the Osmania Sicca rupee with a subordinate coinage. In 1904 an improved Mahbubia rupee was struck and this exchanges with the British rupee at the ratio of 115 or 116 to 100. It has its own postal system and stamps for internal purposes. It maintains its own Army, comprising 19,597 troops, of which 6,064 are classed as Regular and 13,533 as Irregular. There are in addition 696 Imperial Service Troops.

FINANCE—After many vicissitudes, the financial position of the State is strong. The current budget provides for a revenue of Rs. 521 lakhs and a service expenditure of Rs. 478 lakhs. The principal revenue heads are Land Revenue 279 lakhs, Berar rent (land leased in perpetuity to the British Government and incorporated in the Central Provinces) 25 lakhs, Custom, etc., 67 lakhs, Excise 86 lakhs, Interest 34 lakhs.

PROTECTION AND INDUSTRY—The principal industry of the State is agriculture, which maintains 56 per cent of the population. The common system of land tenure is *rotwari*. As no reliable figures are available to show the gross produce it is impossible to say what proportion the land revenue bears to it, but it is collected without difficulty. The principal food crops are millet and rice, the staple money crops cotton, which is grown extensively on the black cotton soils, and oil-seeds. The State is rich in minerals. The great Warangal coal measures are worked at Singareni, but the efforts to revive the historic gold and diamond mines have met with very qualified success. The manufacturing industries are consequent on the growth of cotton and comprise three spinning and weaving mills and ginning and pressing factories in the cotton tracts.

COMMUNICATIONS—One hundred and thirty-seven miles of the broad gauge line from Bombay to Madras traverse the State. At Wadi, on this section, the broad gauge system of the Nizam's Guaranteed State Railway takes off running East to Warangal and South-East toward Bezvada, a total length of 310 miles. From Hyderabad the metre gauge Godavari Railway runs North-West to Manmad on the Great Indian Peninsula Company's system 391 miles. There are thus 471 miles of broad gauge and 391 of metre in the State. The Great Indian Railway owns a short extension to Latour. The roads are generally inferior.

EDUCATION—The State maintains two Colleges. The Nizam College at Hyderabad (first grade) is affiliated to the Madras University. The Oriental College at Hyderabad prepares students for the local Moulvi and Muslim examinations. There are 28 high schools, 63 middle schools, 917 primary schools and 24 special schools including a Medical School in the Dominions.

British Resident—The Hon. Lieut.-Col. Sir F. Paken, C.S.I., C.I.F.

MYSORE

The State of Mysore is surrounded on all sides by the Madras Presidency except on the north and north-west where it is bounded by the districts of Dharwar and North Canara respectively and towards the south-west by Coorg. It is naturally divided into two regions of distinct character, the hill country (the Malnad) on the west and the wide-spreading valleys and plains (the Maidan) on the east. The State has an area of 29,461 square miles excluding that of the Civil and Military Station of Bangalore and a population of 5,705,350, of whom over 92 per cent are Hindus. Kanarese is the distinctive language of the State.

HISTORY—The ancient history of the country is varied and interesting. Tradition connects the table-land of Mysore with many a legend enshrined in the great Indian epics, the Ramayana and the Mahabharata. Coming down to historical times, the north-eastern portion of the country formed part of Asoka's Empire in the third century B.C. Mysore then came under the rule of the Andhra dynasty. From about the third to the eleventh century A.D. Mysore was ruled by three dynasties, the north-western portion by the Kadambas, the eastern and northern portions by the Pallavas and the central and southern portions by the Gangas. In the eleventh century, Mysore formed part of the Chola dominion, but the Cholas were driven out early in the twelfth century by the Hoysalas, an indigenous dynasty with its capital at Halebidu. The Hoysala power came to an end in the early part of the fourteenth century. Mysore was next connected with the Vijayanagar Empire. At the end of the fourteenth century, Mysore became associated with the present ruling dynasty. At first tributary to the dominant empire of Vijayanagar, the dynasty attained its independence after its downfall in 1565. In the latter part of the eighteenth century, the real sovereignty passed into the hands of Haider Ali and then his son Tipu Sultan. In 1799, on the fall of Seringapatam, the British Government restored the State comprised within its present limits, to the ancient dynasty in the person of Maharaja Sri Krishnaraja Wadiyar Bahadur III. Owing to the insurrections that broke out in some parts of the country, the management was assumed by the British Government in 1831. In 1881, the State was restored to the dynasty in the person of Sri Chamarajendra Wadiyar Bahadur under conditions and stipulations laid down in the Instruments of Transfer. That ruler, with the assistance of Mr (afterwards Sir) K. Seshadri Iyer, K.C.S.I., as Dewan, brought Mysore to a state of great prosperity. He died in 1894 and was succeeded by the present Maharaja Sri Sri Krishnaraja Wadiyar Bahadur, G.C.S.I., who was installed in 1902. In November 1913, the Instrument of Transfer was replaced by a Treaty which indicated more appropriately the relation subsisting between the British Government and the State of Mysore.

ADMINISTRATION—The city of Mysore is the capital of the State, but Bangalore City is the administrative head quarters. His Highness the Maharaja is the ultimate authority in the State and the administration is conducted under his control, by the Dewan and three

Members of the Council including the Extraordinary Member. The Chief Court consists of three Judges is the highest judicial tribunal in the State. A Representative Assembly meets once a year at Mysore when the Dewan places before them the annual statement of finances and the measures of the State after which representations are heard and considered. There is also a Legislative Council consisting of 25 members of whom 12 are officials, and 13 non-officials eight elected and five nominated. The Council has recently been given the privileges of interpellation and discussion of the State budget. All the important branches of the administration are controlled by separate heads of departments. For administrative purposes, the State is divided into 8 districts and subdivided into 68 talukas, each district being under a Deputy Commissioner and District Magistrate and each taluk under an Amildar and subordinate Magistrate. The State maintains a military force of 3,202 including 516 in the Imperial Service Regiment (Cavalry) and 480 in the Imperial Service Transport Corps.

FINANCE—The cash balance at the beginning of 1914-15 was Rs 101 lakhs. Total receipts during the year were Rs 278 lakhs and total disbursements Rs 313 lakhs. The principal revenue heads are Land Revenue Rs 103 lakhs, Mining Royalty and Leases Rs 21 lakhs, Forest revenue Rs 17 lakhs, Excise Rs 55 lakhs, Stamps Rs 11 lakhs, Railway Rs 13 lakhs, and Electric power and light Rs 7½ lakhs. Mysore pays an annual subsidy of 35 lakhs to the British Government.

ECONOMIC CONFERENCES—The Mysore Economic Conference was organised in June 1911 with the object of creating and keeping alive public interest in matters connected with the economic progress of the State by a frequent interchange of views and discussions among those competent to deal with them and in order to associate men of enlightenment, public spirited citizens, prominent agriculturists, merchants and others with the officers of Government in such deliberations. The Conference meets annually at Mysore during the festivities in connection with His Highness the Maharaja's birthday. It has three Central Committees dealing with questions connected with Agriculture, Education and Industries and Commerce and District Committees in the several districts.

AGRICULTURE—Nearly three-fourths of the population are employed in agriculture and the general system of land tenure is Ryotwari. The principal food crops are ragi, rice, jola, millets, gram and sugarcane and the chief fibres are cotton and san-hemp. Over 23,000 acres are under mulberry, the silk industry being the most profitable in Mysore next to gold mining. The Department of Agriculture which was recently reorganised on a large scale is popularising agriculture on scientific lines by means of demonstrations, investigations and experiments.

INDUSTRIES—A separate department of Industries and Commerce has been created with a view to improve the existing industries and to provide expert advice and other facilities for the starting of new industries in the State. The manufacturing industries include 12 cotton

ginning mills, 2 cotton presses, 2 cotton mills, 3 silk filatures and 2 woollen mills. There are also 4 oil mills, 11 rice mills, 9 sugar mills, 4 brick and tiles factories, 3 cigar factories, 3 tanneries, 15 mechanical workshops, 2 distilleries, 1 iron and steel works, 1 silk reeling house, 4 flour mills, 2 bone-meal factories, 3 coffee curing works, 3 dyeing factories, 2 breweries, 1 brewery, 12 iron and brass foundries, 1 lacquer work, 2 tanneries, 4 saw mills, 1 weaving factory, 1 pharmaceutical works, 1 soap factory, 1 wood turning and 1 lithographic press. In addition there are 38 pumping plants for irrigation. Besides, 30 mines were at work during 1914—15 for gold, 3 for manganese, 5 for chrome ore, 2 for mica and 5 for other minerals. The value of gold produced last year was nearly 324 lakhs.

BANKING—In 1913, a State-aided bank called the Bank of Mysore was started with its head quarters in Bangalore and agencies at many of the important places in the State. Besides this there is one central Co-operative Bank, one District Bank and 15 Federal Banking Unions and there are now 710 societies working.

COMMUNICATIONS—The Railway system radiates from Bangalore, various branches of the Madras and Southern Mahratta Railway running through the State. The length of the lines owned by the State and worked under contract by the Company is 411 17 miles, of which 988 are of broad gauge and the rest metre gauge. A District Board Railway from Bowringpet to Kolar (11 miles) was opened in December 1915. A Light Railway from Yelbhranki to Chikballapur and a Tramway from Tirukere to Narasimharajapuram have also been opened. Several other projects have been prepared and good progress has been made on some of them.

EDUCATION—There are two first grade colleges, the Central College at Bangalore and the Maharaja's College at Mysore, both affiliated

to the Madras University. They have been efficiently equipped and organised and Honours courses in Physics and History and Economics have been recently instituted. There is also a training College for men and a College for women, the Maharani's College, at Mysore. Primary education has recently been made compulsory in certain selected areas. Schools have been started for imparting education in agricultural, commercial and technical subjects. There are 4263 public and 1,754 private educational institutions in the State. This gives one school to every 480 square miles of the area and to every 947 persons or the population of the State.

PLACES OF INTEREST—Mysore City, the capital, is a modern city laid out with fine roads and suburbs. The prominent buildings are the Palace, the Chamarajendra Technical Institute, Government House, the Maharaja's College, the Maharani's College and the Oriental Library.

Bangalore, the largest city in the State and the commercial and manufacturing centre, stands on a table land, 3,000 feet above the sea and is noted for its salubrious climate and luxuriant gardens. The principal places of interest are the Public Offices, the Central College buildings, the Museum, the Lal Bagh, the Indian Institute of Science and the Indian Sanskrit Institute.

The historic town of Srirangapatam, the famous Jog Falls, the Kolar Gold Fields, the Srirangamudram and Belur, Somnathpur and Halebid with their temples of exquisite architecture, are some of the other important places of interest in the State.

Resident and Chief Commissioner of Coorg—The Hon'ble Lieut.-Col. Sir Hugh Daly, K.C.I.E., C.S.I.

Deewan—Sir M. Visveswaraya, B.A., K.C.I.E.

BARODA.

The State of Baroda is situated partly in Gujarat and partly in Kathiawar. It is divided into four distinct blocks: (1) the southern District of Navsari near the mouth of the Tapi river, and mostly surrounded by British territory, (2) central district, North of the Narmada, in which lies Baroda, the capital city, (3) to the North of Ahmedabad, the District of Kadi, and (4) to the West, in the Peninsula of Kathiawar, the district of Amreli, formed of scattered tracts of land. The area of the State is 8,182 square miles, the population is over two millions, of whom over four-fifths are Hindus.

HISTORY—The history of the Baroda State as such dates from the break-up of the Mughal Empire. The first Maratha invasion of Gujarat took place in 1705, and in this and later incursions Pilaji Gaikwar, who may be considered as the founder of the present ruling family, greatly distinguished himself. Songhad was the Head quarters till 1766. Since 1723 Pilaji regularly levied tribute in Gujarat. His son Damaji finally captured Baroda in 1734, since when it has always been in the hands of the Gaikwars, but Mughal authority in Gujarat did not end until the fall of Ahmedabad, in 1763, after which the country was

divided between the Gaikwar and the Peshwa. In spite of the fact that Damaji was one of the Maratha chiefs defeated at Panipat by Ahmed Shah, he continued to add to his territory. He died in 1768 leaving the succession in dispute between two rival sons. He was succeeded in turn by his sons Savaji Rao I, Fattessing Rao, Manaji Rao and Gorind Rao. The last died in 1800, and was succeeded by Anand Rao. A period of political instability ensued which was ended in 1802 by the help of the Bombay Government, who established the authority of Anand Rao at Baroda. By a treaty of 1805 between the British Government and Baroda, it was arranged *inter alia* that the foreign policy of the State should be conducted by the British, and that all differences with the Peshwa should be amicably arranged. Baroda was a staunch ally of the British during the wars with Bajji Rao Peshwa, the Pindari hordes and Holkar. But from 1820 to 1841, when Sayaji Rao II was Gaikwar, differences arose between the two Governments which were settled by Sir James Carnac, Governor of Bombay in 1841. Ganpat Rao succeeded Savaji Rao in 1847. During his rule, the political supervision of Baroda was transferred to the Supreme Go-

vernment His successor Khande Rao, who ascended the *Gadri* in 1856, introduced many reforms. He stood by the British in the Mutiny. He was succeeded by his brother Malhar Rao in 1870. Malhar Rao was deposed in 1876 for "notorious misconduct" and "gross misgovernment," but the suggestion that he had instigated the attempt to poison Col Playre, the Resident, was not proved. Sayaji Rao III, a boy of 13 years of age, who was descended from a distant branch of the family, was adopted as heir of Khande Rao in 1875 and is the present Gaikwar. He was invested with full powers in 1881.

ADMINISTRATION—An executive council, consisting of the principal officers of the State, carries on the administration, subject to the control of the Maharaja, who is assisted by a Dewan and other officers. A number of departments have been formed, which are presided over by officials corresponding to those in British India. The State is divided into four *prants* each of which is subdivided into *Mahals* and *Peta Mahals* of which there are in all 42. Attempts have for some years been made to restore village autonomy, and village panchayats have been formed which form part of a scheme for local self-government. There is a Legislative Department, under a Legal Remembrancer, which is responsible for making laws. There is also a Legislative Council, consisting of nominated and elected members. A High Court at Baroda possesses jurisdiction over the whole of the State and hears all final appeals from the decisions of the High Court, appeals lie in certain cases, to the Maharaja, who decides them on the advice of the *Huzur Nyaya Sabha*. The State Army consists of 5,084 Regular forces and 3,806 Irregular forces.

FINANCE—In 1913-14, the total receipts of the State were Rs 200 lakhs and the disbursements Rs 142 lakhs. The principal Revenue heads were—Land Revenue, Rs 117 lakhs, Abkari, Rs 21 lakhs, Opium, Rs 23 lakhs, Railways, Rs 8 lakhs, Interest Rs 7 lakhs, Tribute from other States, Rs 2 lakhs. British Currency was introduced in 1901.

PRODUCTION AND INDUSTRY—Agriculture and pasture support 68 per cent of the people. The principal crops are rice, wheat, gram, castor-oil, rapeseed, poppy, cotton, san hemp,

tobacco, sugarcane, maize and garden crops. The greater part of the State is held on *ryotwari* tenure. The State contains few minerals except sandstone, which is quarried at Songli, and a variety of other stones which are little worked. There are 33 industrial or commercial concerns in the State registered under the State Companies' Act. There are five Agricultural Banks and 202 Co-operative Societies in Baroda.

COMMUNICATIONS—The B B & C I Railway crosses part of the Navsari and Baroda *prants*, and the Rajputana-Malwa Railway passes through the Kadi *prant*. A system of branch lines has been built by the Baroda Durbar in all the four *prants*, in addition to which the Japti Valley Railway and the Baroda Godhra Chord line (B B & C I) pass through the State. The Railways constructed by the State are 412 miles in length and 120 miles are under construction. Good roads are not numerous.

EDUCATION—The Education Department controls 3,088 institutions of different kinds, in 58 of which English is taught. The Baroda College is affiliated to the Bombay University. There are a number of high schools, technical schools, and schools for special classes, such as the jungle tribes and unclean castes. The State is "in a way pledged to the policy of free and compulsory primary education." It maintains a system of rural and travelling libraries. Ten per cent of the population is returned in the census as literate. Total expense on Education is about Rs 17 lakhs.

CAPITAL CITY—Baroda City with the cantonment has a population of 99,345. It contains a public park, a number of fine public buildings, palaces and offices, and it is crowded with Hindu temples. The cantonment is to the North-west of the city and is garrisoned by an Infantry battalion of the Indian Army. An Improvement Trust has been formed to work in Baroda City and has set itself an ambitious programme.

RULER—His Highness Farzand-i-Khas-i-Dowlat-i-Inglishia Maharaja Sir Savaji Rao Gaekwar Sena Khas Khel, Samsher Bahadur, GCSI, Maharaja of Baroda.

Resident—Lt-Col L Impey, CIE

Dewan—V P Madhao Rao, CIE (*Retired*)

KASHMIR.

Kashmir (known to Indians as Jammu) lies to the east of the Indus and to the west of the Ravi. It is a mountainous country with just a strip of level land along the Punjab frontier, and intersected by valleys of which many are of surpassing beauty and grandeur. It may be divided physically into two areas: the north-eastern comprising the area drained by the Indus with its tributaries, and the south-western, including the country drained by the Jhelum, the Kishanganga and the Chenab. The dividing line between those two areas is the great central mountain range. The area of the State is 84,432 square miles, and the population 3,158,126.

HISTORY—Various poets have left more or less trustworthy records of the history of the valley down to 1586, when it was conquered by Akbar. Srinagar, the capital, had by then been long established, though many of the fine buildings erected by early Hindu rulers had been

destroyed by the Mahomedan kings who first appeared in the 12th century. In the reign of Sikandar the population became almost entirely Mahomedan. Akbar visited the valley three times. Jehangir did much to beautify it, but after Aurangzebe there was a period of disorder and decay, and by the middle of the eighteenth century the *Subah* of Kashmir was practically independent of Delhi. Thereafter it experienced the oppression of Afghan rule until it was rescued, in 1819, by an army sent by Ranjit Singh. Sikh rule was less oppressive than that of the Afghans. The history of the State as at present constituted is practically that of one man, a Dogra Rajput, Gulab Singh of Jammu. For his services to the Sikhs this remarkable man had been made Raja of Jammu in 1820, and he added largely to his territory by conquest. He held aloof from the war between the British and the Sikhs, only appearing as mediator after the battle of Sobraon.

(1846) when the British made over to him for Rs 75 lakhs the present territories of the State. He had to fight for the valley and subsequently lost part of his State, Gilgit, over which the successors had at a heavy cost to reassert their claims. His son Ranbir Singh, a model Hindu, ruled from 1857 to 1885 when he was succeeded by his eldest son Major-General H H Maharaja Sir Partab Singh GCSI, GCIE.

ADMINISTRATION—For some years the Maharaja took no part in the administration of the State, but since 1905 he has exercised full powers, assisted by a Chief Minister—Rai Sahab Diwan Amar Nath, CIE—a Home Minister, and a Revenue Minister. The four chief executive officers are the Governors of Jammu and of Kashmir, the Wazir Wazarat of Gilgit and the Wazir Wazarat of Ladakh. The real administrative power lies with the petty subordinate officers (tahsildars) who exercise revenue, civil, and criminal jurisdiction with regular stages of appeal, but distance and the absence of easy communications are practical checks on the use or abuse of appeals. The British Resident has his headquarters at Srinagar, there is also a Political Agent at Gilgit responsible to the Government of India for the administration of the outlying petty States, and a British Officer is stationed at Leeb to assist in the supervision of Central Asian trade. In the Dogras the State has splendid materials for an Army, which consists of 6,961 troops, of whom 3,570 are maintained as Imperial Service troops.

FINANCE—The financial position of the State is strong and it has more than 46 lakhs invested in Government of India securities. The total revenue last year was 98 lakhs, the chief items being land revenue, forests, customs and octroi.

PRODUCTION AND INDUSTRY—The population is pre-eminently agricultural and pastoral. The system of land tenure has been described as "rotwari in ruins" great complexity existing owing to the fact that there is no local law of rent and revenue. The principal food crop is rice, maize, cotton, saffron, tobacco, hops (autumn crops) and wheat, barley, poppy, beans (spring crops) are also grown. Sheep are largely kept. The State forests are extensive and valuable. Exploration for minerals has not been attempted on sound principles. Vast fields of friable, dusty coal have been found. Gold has been found at Gulmarg and Sapphires in Padar. The industries of manufacture are

chiefly connected with sericulture (the silk filature at Srinagar, the largest in the world, was destroyed by fire in July 1912), oil-pressing and the manufacture of wine. The woollen cloth, shawls, and wood carving of the State are famous.

COMMUNICATIONS—The State contains only 16 miles of railway on the Tawi-Suchetgarh branch of the N-W Railway. The Jhelum is the only navigable river. At present there is much activity in improving road communications, but in many parts of the country wheeled traffic is unknown.

PUBLIC WORKS—In 1904 a flood spill channel above Srinagar was constructed with a view to minimizing the constant risk of floods, and it was hoped that the danger would be still further reduced by the carrying out of a scheme for lowering a part of the bed of the Jhelum, which has since been taken in hand. Good progress has been made with irrigation, but the most important schemes of recent years have been those for an electrical power station on the Jhelum River, and for a Railway into Kashmir. It was proposed to supply from this power station electrical energy for various State schemes (including the Jhelum dredging scheme) and for private enterprise and possibly for working the proposed Kashmir Railway. The works were completed about 1907, and the scheme according to the latest reports is working very satisfactorily. The proposal for a railway to Kashmir had been under discussion for many years, the nature of the country making the question of route a difficult one. In 1905, a decision was taken in favour of a line from Srinagar via the Jhelum Valley and Abbottabad, but the project has remained in abeyance pending the consideration of further schemes among which are proposals for lines of ropeway from Jammu to Srinagar and from Srinagar to the western borders via the Jhelum Valley.

EDUCATION—In educational matters Kashmir is the most backward tract in the whole of India. In the State as a whole only 2 in every 100 persons can read and write. The number of educational institutions has increased from 45 in 1891 to 379 in 1911.

Resident—The Hon. Mr S M Fraser, CSI, CIE.

Political Agent, at Gilgit—Major A D Macpherson.

BALUCHISTAN AGENCY.

In this Agency are included the Native States of Kalat, Kharan and Las Bela. The Khan of Kalat is head of the Baluchistan tribal chiefs whose territories are comprised under the following divisions—Jhalwan, Sarawan, Makran, Kachhi, Domki-Kaheri-Umrani and Nasirabad. Niabat. These districts form what may be termed Kalati Baluchistan, and occupy an area of 71,598 square miles. The inhabitants of the country are either Brahuys or Baluchis, both being Mahomedans of the Sunni sect. The country is sparsely populated, the total number being about 470,000. It derives its chief importance from its position with regard to Afghanistan on the north-western frontier of British India. The relations of Kalat with the British Government are governed by two treaties of 1854 and 1876, by the latter of which the

Khan agreed to act in subordinate co-operation with the British Government. There are, however, agreements with Kalat in connection with the construction of the Indo-European telegraph, the cession of jurisdiction on the railways and in the Bolan Pass, and the permanent lease of Quetta, Nushki and Nasirabad. The Khan is assisted in the administration of the State by a Political Adviser lent by the British Government. The Governor-General's Agent in Baluchistan conducts the relations between the Government of India and the Khan, and exercises his general political supervision over the district. The revenue of the State is about Rs 7,65,000. The present Khan is His Highness Amir Sir Mahumud Khan of Kalat, GCSI, CIE. He was born in 1864.

Kharan extends in a western and south-

westerly direction from near Nushki and Kalat to the Persian border. Its area is 14,210 square miles, it has a population of 19,610 and an annual average revenue of about Rs 90,000.

The Chief of Kharan, Sardar Sir Nauroz Khan, K.C.I.E., died in June 1909, and was succeeded by his son, Sardar Yakub Khan. The attitude of the new chief towards Government, and his administration generally were unsatisfactory. In 1911, he was murdered by the sepoy of his guard. Some trouble was caused by an uncle of the murdered chief, who declared himself Chief, but the Government of India finally recognised the succession of a son, Mir Habibulla Khan, and approved measures for the administration of the State during his minority.

Las Bela is a small State occupying the valley and delta of the Purahi river, about 50 miles west

of the Sind boundary. Area 6,111 square miles, population 50,100, chiefly Sunni Mahomedans, estimated revenue about Rs 2,25,000. The Chief of Las Bela, known as the Jam, is bound by agreement with the British Government to conduct the administration of his State in accordance with the advice of the Governor-General's Agent. This control is exercised through the Political Agent in Kalat. Sentences of death must be referred for confirmation. The Jam also employs an approved Wazir, to whose advice he is subject and who generally assists him in the transaction of State business.

Agent to the Governor-General for Baluchistan—Lieut.-Col Sir John Ramsay, K.C.I.E., C.S.I.

Political Agent, Kalat and Bolan Pass—Lieut.-Colonel A. B. Dew.

RAJPUTANA AGENCY.

Rajputana is the name of a great territorial circle with a total area of about 130,462 square miles, which includes 18 Native States, two chiefships, and the small British province of Ajmer-Merwara. It is bounded on the west by Sind, on the north-west by the Punjab State of Bahawalpur, on the north and north-east by the Punjab, on the east by the United Provinces and Gwalior, while the southern boundary runs across the central region of India in an irregular zig-zag line. Of the Native States 17 are Rajput, 2 (Bharatpur and Dholpur) are Jat, and one (Tonk) is Mahomedan. The chief administrative control of the British district is vested *ex-officio* in the political officer, who holds the post of Governor-General's Agent for the supervision of the relations between the several Native States of Rajputana and the Government of India. For administrative purposes they are divided into the following groups—Alwar Agency, Bikanir Agency, Eastern Rajputana Agency, 3 States (Bharatpur, Dholpur, Karauli), Haroti and Tonk Agency, 3 States (principal States Bundi and Tonk), Jaipur Residency, 3 States (principal State, Jaipur), Kotah and Jhalawar Agency, 2 States, Mewar Residency, Southern Rajputana States Agency, 4 States (principal State, Banswara), Western Rajputana States Agency, 3 States (principal States, Marwar and Sirohi).

The Aravalli Hills intersect the country almost from end to end. The tract to the north-west of the hills is, as a whole, sandy, ill-watered and unproductive, but improves gradually from being a mere desert in the far west to comparatively fertile lands to the north-east. To the south-east on the Aravalli Hills lie higher and more fertile regions which contain extensive hill ranges and which are traversed by considerable rivers.

COMMUNICATIONS.—The total length of railways in Rajputana is 1,576 miles, of which 739 are the property of the British Government. The Rajputana-Malwa (Government) runs from Ahmedabad to Bandikui and from there branches to Agra and Delhi. Of the Native State railways the most important is the Jodhpur-Bikaner line from Marwar Junction to Hyderabad (Sind) and to Bikaner.

INHABITANTS.—Over 50 per cent of the population are engaged in some form of agriculture, about 20 per cent of the total population are

maintained by the preparation and supply of material substances, personal and domestic service provides employment for about 5 per cent and commerce for 2½ per cent of the population. The principal language is Rajasthani. Among castes and tribes, the most numerous are the Brahmans, Jats, Mahajans, Chamars, Rajputs, Minas, Gujars, Bhils, Mahis, and Balais. The Rajputs are, of course, the aristocracy of the country, and as such hold the land to a very large extent, either as receivers of rent or as cultivators. By reason of their position as integral families of pure descent, as a landed nobility, and as the kinsmen of ruling chiefs, they are also the aristocracy of India, and their social prestige may be measured by observing that there is hardly a tribe or clan (as distinguished from a caste) in India which does not claim descent from, or irregular connection with, one of these Rajput stocks.

The population and area of the States are as follows—

Name of State	Area in square miles	Population in 1911
<i>Mewar Residency—</i>		
Udaipur	12,953	1,293,776
Banswara	1,946	165,463
Dungarpur	1,447	159,192
Partabgarh	686	62,704
<i>Western States Residency—</i>		
Jodhpur	34,963	2,057,553
Jaisalmer	16,062	688,311
Sirohi	1,964	189,127
<i>Jaipur Residency—</i>		
Jaipur	15,579	2,636,674
Kishangarh	858	87,191
Lawa	19	2,564
<i>Haroti-Tonk Agency—</i>		
Bundi	2,220	218,730
Tonk	1,114	303,181
Shahpura	405	47,397
<i>Eastern States Agency—</i>		
Bharatpur	1,982	626,665
Dholpur	1,155	270,973
Karauli	1,242	156,786
<i>Kotah-Jhalawar Agency—</i>		
Kotah	5,684	639,089
Jhalawar	810	96,271
Bikaner	23,311	700,983
Alwar	3,141	791,688

but this was disallowed and British protection was granted in 1853. The present ruler is His Highness Maharajah Dhiraj Maharao Sir Kesri Singh Bahadur, G.C.I.E., K.C.I.E. The State is ruled by the Maharao with the assistance of a Diwan and other officials. Revenue about 7 lakhs. Expenditure 6 lakhs.

Jaipur State is the fourth largest in Rajputana. It consists, for the most part, of level and open country. The Maharaja of Jaipur is the head of the Kachwaha clan of Rajputs, which claims descent from Kusa, the son of Rama, king of Ajodhya, and the hero of the famous epic poem the Ramayana. The dynasty in Eastern Rajputana dates from about the middle of the twelfth century, when Amber was made the capital of a small State. The Chiefs of that State acquired fame as generals under the Mughals in later centuries, one of the best known being Sawai Jai Singh in the eighteenth century who was remarkable for his scientific knowledge and skill. It was he who moved the capital from Amber and built the present city of Jaipur and elevated the State above the principalities around. On his death a part of the State was annexed by the Jats of Bharatpur and internal disputes brought Jaipur to great confusion. British protection was extended to Jaipur in 1818, but the State continued to be disturbed and a Council of Regency was appointed, which governed up to 1851, when Maharaja Ram Singh assumed full powers. He nominated as his successor Kaim Singh who succeeded in 1880, under the name of Sawai Madho Singh II, and is the present ruler. He was born in 1861, and, in consideration of his youth, the administration was at first conducted by a Council under the joint presidency of the Maharaja and the Political Agent. He was invested with full powers in 1882. In 1887, his salute was raised from 17 to 19 guns as a personal distinction, followed in 1896 by two additional guns. In 1888 he was created a G.C.S.I. In 1901 a G.C.I.E., and in 1903 a G.O.V.O. In 1904 he was made honorary colonel of the 13th Rajputs, and in 1911 a Major General. In 1908 he was presented with the Honorary degree of LL.D. of Edinburgh University and in 1912, made a Donat of the Order of the Hospital of St. John of Jerusalem. Among important events of His Highness's rule may be mentioned the raising of the Imperial Service Transport Corps in 1889-90, the construction of numerous irrigation works, hospitals and dispensaries, and the gift of 20 lakhs as an endowment to the Indian People's Famine Relief Trust. Jaipur City is the largest town in Rajputana and is one of the few eastern cities laid out on a regular plan. It contains, in addition to the Maharaja's Palace, many fine buildings. The administration of the State is carried on by the Maharaja assisted by a Council of ten members. The military force consists of an Imperial Service Transport Corps which has twice served in Frontier campaigns and about 5,000 infantry, 700 cavalry and 860 artillerymen. The normal revenue is about 65 lakhs, expenditure about 59 lakhs.

Kishangarh State is in the centre of Rajputana and consists practically of two narrow strips of land separated from each other, the northern mostly sandy, the southern generally flat and fertile. The Chiefs of Kishangarh

belong to the Rathor clan of Rajputs and are descended from Raja Udai Singh of Jodhpur, whose second son founded the town of Kishangarh in 1611. The State was brought under British protection in 1818. After various disputes necessitating British mediation, the State entered into good hands and was well ruled during the latter part of the nineteenth century. The present ruler is Major His Highness Maharaja Dhiraj Sir Madan Singh Bahadur, K.C.S.I., K.C.I.E., Umdal Rajhai-Buland Makan, who was born in 1884 and was invested with powers in 1905. He administers the State with the help of a Council of three members. Revenue 5.7 lakhs. Expenditure 4.6 lakhs.

Lawa State, or Takurat, of Rajputana is a separate chieftship under the protection of the British Government and independent of any Native States. It formerly belonged to Jaipur and then became part of the State of Tonk. In 1867, the Nawab of Tonk murdered the Thakur's uncle and his followers, and Lawa was then raised to its present State. The Thakurs of Lawa belonged to the Naruka sept of the Kachwaha Rajputs. The present Thakur, Mangal Singh, was born in 1873, and succeeded to the estate in May, 1892. Revenue about Rs. 11,000.

Bundi State is a mountainous territory in the south-east of Rajputana. The Chief of Bundi is the head of the Hara sept of the great clan of Chauhan Rajputs and the country occupied by this sept has for the last five or six centuries been known as Harauti. The State was founded in the early part of the fourteenth century and constant feuds with Mewar and Malwa followed. It threw in its lot with the Mahomedan emperors in the sixteenth century. In later times it was constantly ravaged by the Marathas and Pindaries and came under British protection in 1818 at which time it was paying tribute to Holkar. The present ruler of this State—which is administered by the Maharao Raja and a Council of 5 in an old-fashioned but popular manner—is His Highness Maharao Raja Sir Raghubir Singh Bahadur, G.C.I.E., G.O.V.O., K.C.S.I. He was born in 1869 and succeeded in 1899. Revenue about 10 lakhs. Expenditure 9.6 lakhs.

Tonk State—Partly in Rajputana and partly in Central India, consists of six districts separated from each other. The ruling family belongs to the Pathans of Afghans of the Buner tribe. The founder of the dynasty was Amir Khan, a General in the army of Holkar at the end of the eighteenth century. He received a conditional guarantee of the lands he held under the Afghans from Holkar in 1817. His son was deposed in 1867 owing to misrule. The present ruler of the State is His Highness Nawab Sir Muhammad Ibrahim Ali Khan Bahadur, G.C.I.E. The administration is conducted by the Nawab and a Council of four members, but the Political Agent takes an active part in the guidance of the administration and the finances—owing to the indebtedness of the State. Revenue 11 lakhs. Expenditure 9 lakhs.

Shahpura Chieftship is a small pastoral State. The ruling family belongs to the Seesha clan of Rajputs. The Chieftship came into existence about 1629, being a grant from the Emperor Shah Jahan to one Sujan Singh. The present Chief is Sir Nahar Singh, K.C.I.E. who

sent a force to co-operate with Lord Lake in the war of 1803 and an alliance was concluded with him in that year, when the boundaries of the State as now recognised were fixed. Various rebellions and disputes about succession mark the history of the State during the earlier part of the nineteenth century. The present chief, H. H. Lt-Col Sewai Maharaja Sir Jey Singhji Bahadur, K.C.S.I., K.C.I.E., who was born in 1882, succeeded his father in 1892 and was invested with powers in 1903. He carries on the administration with the assistance of a Council of four Ministers, Members of His Highness, Council and various heads of departments. The normal revenue and expenditure are about Rs 32 lakhs a year. The State maintains an Imperial service regiment of cavalry, another of infantry, and an irregular force. The late Maharaja was the first chief in Rajputana to offer (in 1888) aid in the defence of the Empire.

The capital is Alwar on the Rajputana-Malwa Railway, 98 miles south-west of Delhi.

RAJPUTANA

Agent to Government—General—Sir E. G. Colvin

MEWAR

Resident—Lieut-Col J. L. Kaye

JAIPUR

Resident—Vacant

EASTERN RAJPUTANA STATES

Political Agent—Lieut-Col A. D. A. G. Binnerman

WESTERN RAJPUTANA STATES

Resident—Lieut-Col C. J. Windham

MARATHI AND TONK

Political Agent—Lieut H. B. Peacock

KOTAH AND MALAWAR

Political Agent—Lieut-Col H. B. Peacock

CENTRAL INDIA AGENCY.

Central India is the name given to the country occupied by the Native States grouped together under the supervision of the Political Officer in charge of the Central India Agency. These States lie between 21° 24' and 26° 32' N lat and between 74° 0' and 83° 0' E long. The British districts of Jhansi and Lalitpur divide the agency into two main divisions—Bundelkhand and Baghelkhand lying to the east, and Central India proper to the west. The total area covered is 78,772 square miles, and the population (1911) amounts to 93,980. The great majority of the people are Hindus. The principal States are eight in number—Gwalior, Indore, Bhopal, Rewa, Dhar, Jaora, Datia and Orchha, of which two, Bhopal and Jaora, are Mahomedan and the rest are Hindu. Besides these there are a multitude of petty States held by their rulers under the immediate guarantee of the British Government, but having feudal relations with one or other of the larger States. The total number of States amounts to 153. For administrative purposes they are divided into the following groups: Baghelkhand Agency, 12 States (principal State Rewa); Bhopal Agency, 19 States (principal Bhopal); State Bhopawar Agency, 21 States (principal State Dhar); Bundelkhand Agency, 22 States (principal States, Datia and Orchha); Gwalior Agency, 32 States (principal State, Gwalior); Indore Residency, 9 States (principal State, Indore); Malwa Agency, 38 States (principal State, Jaora). The Agency may be divided into three natural divisions, the plateau, lowlying, and hilly. The plateau tract includes the Malwa plateau, the Highland tract stretching from the great wall of the Vindhya to Marwar, the land of open rolling plains. The lowlying tract embraces Northern Gwalior and stretches across into Bundelkhand and Baghelkhand up to the Kaimur Range. The hilly tract lies along the ranges of the Vindhya and the Satpura. There agriculture is little practised, the inhabitants being mostly members of the wild tribes. The territories of the different States are much intermingled, and their political relations with the Government of India and each other are very varied. Eleven Chiefs have direct treaty engagements with the British Government.

The following list gives the approximate size population and revenue of the eight principal States above mentioned—

Name	Area in square miles	Population	Revenue
Gwalior	25,133	3,102,270	Rs lakhs 140
Indore	9,506	1,007,856	70
Bhopal	6,902	730,383	30
Rewah	13,000	1,514,843	53
Dhar	1,783	154,070	9
Jaora	568	75,951	8
Datia	911	151,603	9
Orcha	2,079	330,032	11

Gwalior—The house of Sindhia traces its descent to a family of which one branch held the hereditary post of patel in a village near Sitara. The head of the family received a patent of rank from Aurangzebe. The founder of the Gwalior House was Ranoji Sindhia who is said to have been a personal attendant on the Peshwa Bajirao. In 1726 together with Malhar Rao Holkar, the founder of the house of Indore, he was authorised by the Peshwa to collect revenues and he fixed his headquarters at the ancient city of Ujjain, which became the capital of the Sindhia dominions. Gwalior subsequently played a leading part in shaping the history of India. The reverses which Sindhia's troops met with at the hands of the British in 1778 and 1760 led to the treaty of Salbai (1782), which made the British arbiters in India and recognised Sindhia as an independent Chief and not as a vassal under the Peshwa. Subsequently Sindhia's military power, developed by the French Commander DeBoigne, was completely destroyed by the British victories of Ahmednagar, Assaye, Asarganj and Laswari.

The present ruler is Major-General H. H. Mahadho Rao Sindhia G.O.S.I., A.D.C. to the King. He succeeded in 1886 and obtained powers in 1894. In 1901 he went to China during the war, he holds the rank of honorary Major-General of the British Army and the honorary degree of LL.D., Cambridge. The

administration is controlled by the Maharaja assisted by five members of the Mughal khans.

The northern part of the State is traversed by the G. I. P. Railway and two branches run from Bhopal to Ujjain and from Bhopal to Baran. The Gwalior Light Railway runs for 250 miles from Gwalior to Bindal from Gwalior to Shopoor and from Gwalior to Sijli. The main industries are cotton spinning which is done all over the State, the mulberry and at Chanderi leather work etc. The State maintains the regiments of Imperial Service Cavalry, two battalions of Imperial Service Infantry and a transport corps. Laheer the capital city is two miles to the south of the present city and the fort of Gwalior. Annual expenditure 1,50 lakhs.

Indore—The Holkars of Indore belong to the shepherd class the founder of the house, Malhar Rao Holkar being born in 1699. His soldierly qualities brought him to the front under the Peshwa who took him into his service and employed him in his conquests. When the Maratha power was broken at the battle of Panipat, in 1761 Malhar Rao had acquired vast territories stretching from the Deccan to the Ganges. He was succeeded by a lunatic son who again was succeeded by his mother, Ahilya Bai whose administration is still looked upon as that of a model ruler. Disputes as to the succession and other causes weakened this powerful State, and, when it assumed a hostile attitude on the outbreak of war in 1817 between the British and the Peshwa, Holkar was compelled to come to terms. The Treaty of Mandasore in 1818 still governs the regulations existing between the State and the British Government. In the mutiny of 1857 when Holkar was unable to control his troops he personally gave every possible assistance to the authorities at Mhow.

In 1903 Sivaji Rao abdicated in favour of his son, His Highness Maharaja Tukoji Rao Holkar, the present ruler, who was born in 1890, and was formally invested with ruling powers in November 1911. In the administration His Highness is assisted by his Chief Minister and a Council of 5 Ministers. The State Army consists of 519 Imperial Service Troops and 1,629 State forces. The capital is Indore City on the Ajmer-Khandwa Section of the Rajputana-Malwa Railway. The ordinary revenue for 1914-15 is estimated at Rs. 85,49,400 and the ordinary expenditure estimated for that year is about the same amount.

Bhopal—Bhopal State was founded by Dost Muhammad Khan an Afghan from Tirah, who went to Delhi in 1708 in search of employment. Obtaining a lease of the Berasia Perganas he extended his dominions, assumed independence, and adopted the title of Nawab. Of subsequent rulers the most noticeable is Vatulla a lady of remarkable power, who controlled the State for 50 years. In the early part of the nineteenth century the State successfully withstood the combined attacks of Gwalior and Nagpur, and, by the agreement of 1817, Bhopal undertook to assist the British with a contingent force and to co-operate against the Pindari bands.

The present Begum is Her Highness Nawab Sultan Jahan, G.C.S.I., G.C.I.E., C.I.O., who succeeded in 1901 and personally conducts the administration of her State assisted by her eldest son, Nawab Mohamed Nasrulla Khan.

The State Army consists of 2,219 men, including a regiment of Imperial Service Cavalry commanded by a son of the present ruler. The capital is Bhopal City, at the Junction of the Midland Section of the G. I. P. Railway and the Bhopal-Ujjain Railway.

Rewah—This State lies in the Baghelkhand Agency, and falls into two natural divisions separated by the scarp of the Kaimur range. Its Chiefs are Baghel Rajputs descended from the Solanki clan which ruled over Gujrat from the tenth to the thirteenth century. In 1812 a body of Pindaries raided Mirzapur from Rewah territory and the chief, who had previously rejected overtures for an alliance, was called upon to accede to a treaty acknowledging the protection of the British Government. During the Mutiny, Rewah offered troops to the British, and for his services then, various parganas, which had been seized by the Marathas, were restored to the Rewah Chief. The present chief is H. H. Maharaja Sir Venkat Raman Singh, G.C.S.I., who was born in 1876. He is assisted in the administration by two Commissioners, one for revenue matters and one for judicial. The State force consist of about 1,700 men. The State is famous for its archaeological remains and is rich in minerals, coal being mined at Umaria. The average expenditure is Rs. 11 lakhs.

Dhar—This State, under the Bhopawar Agency takes its name from the old city of Dhar long famous as the capital of the Paramara Rajputs, who ruled over Malwa from ninth to the thirteenth century and from whom the present chiefs of Dhar—Ponwar Marathas—claim descent. In the middle of the 18th century the Chief of Dhar, Anand Rao, was one of the leading chiefs of Central India, sharing with Holkar and Sindhia the rule of Malwa. But in 1819, when a treaty was made with the British, the State had become so reduced that it consisted of little more than the capital. The ruler is H. H. Raja Sir Udaji Rao Ponwar, K.C.S.I. who was born in 1886, and has control of all civil, judicial, and ordinary administrative matters. There are 22 feudatories, of whom 13 hold under a guarantee from the British Government. The average expenditure is about 8 lakhs.

Jaora State—This State is in the Malwa Agency and has its head quarters at Jaora town. The first Nawab was an Afghan from Swat, who had come to India to make his fortune, found employment under the freebooter Amir Khan, and obtained the State after the treaty of Mandasore in 1817. The present chief is Major H. H. Sir Mahomed Irtikhar Ali Khan, K.C.I.E., who was born in 1883 and is an honorary major in the Indian Army. The soil of the State is among the richest in Malwa being mainly of the best black cotton variety, bearing excellent crops of poppy. The average annual revenue is Rs. 7,72,000.

Rutlam State—In the Malwa Agency, has an area of 902 square miles. The Rajas are Rathor Rajputs or the Jodhpur house the present chief being H. H. Raja Sajjan Singh, who succeeded in 1893. Revenue about five lakhs.

Datia State—The chiefs of this State, in the Bundelkhand Agency, are Bundela Rajputs of the Orchha house. The territory was granted by the chief of Orchha to his son Bhagwan Rao in 1626, and this was extended by conquest and

by grants from the Delhi emperors. The present chief is H. H. Maharaja Lokendra Gobind Singh Bahadur, who was born in 1880 and succeeded in 1907.

Orchha State—The chiefs of this State are Bundela Rajputs claiming to be descendants of the Galarwars of Benares. It was founded as an independent State in 1048 A. D. It entered into relations with the British by the treaty made in 1812. The present ruler is His Highness Sir Pratap Singh, G. C. S. I., G. C. I. E., who was born in 1854. He has the title of Saramad-i-Rajaha-i-Bundelkhand Maharaja Mahendra Sawai Bahadur. The State has a population of 330,032 and an area of 2080 square miles. The capital is Tikamgarh, 36 miles from Lalitpur on the G. I. P. Railway. Orchha, the old capital, has fallen into decay but is a place of interest on account of its magnificent buildings of which the finest were erected by Bir Singh Deo, the most famous ruler of the State (1605-1627).

Agent to Governor-General—O. V. Bosanquet

JNDORE

Resident—C. L. S. Russell

BHOPAL

Political Agent—W. S. Davis

BUNDELKHAND

Political Agent—Lieut.-Col. P. T. A. Spence

BAGHELKHAND

Political Agent—Lieut.-Col. S. H. Godfrey

BHOPAWAR

Political Agent—L. M. Crump

Sikkim.

Sikkim is bounded on the north and north-east by Tibet, on the south-east by Bhutan, on the south by the British district of Darjiling, and on the west by Nepal. The population consists of Bhutias, Lepchas, and Nepalese. It forms the direct route to the Chumbi Valley in Tibet. The main axis of the Himalayas, which runs east and west, forms the boundary between Sikkim and Tibet. The Singalila and Chola ranges, which run southwards from the main chain, separate Sikkim from Nepal on the west, and from Tibet and Bhutan on the east. From the eastern flank of the Singalila range rise the great snow peaks of Kinchinjunga (28,146 feet), one of the highest mountains in the world, it throws out a second spur terminating at Tendong. The Chola range which is much loftier than that of Singalila, leaves the main chain at the Dongkya mountain.

Tradition says that the ancestors of the rajas of Sikkim originally came from eastern Tibet. The State was twice invaded by the Gurkhas at the end of the eighteenth century. On the outbreak of the Nepal War in 1814, the British formed an alliance with the Raja of Sikkim and at the close of the war the Raja was rewarded by a considerable accession of territory. In 1835 the Raja granted the site of Darjiling to the British and received Rs. 3,000 annually in lieu of it. This grant was stopped and a part of the State was annexed for the seizure and detention of Dr. Campbell, the Superintendent of Darjiling, and Dr. Hooker, the famous naturalist, in 1849. The State was previously under the Government of Bengal, but was brought under the direct supervision of the Government of India in 1906.

The State is thinly populated, the area being 2,818 square miles, and the population 87,920, chiefly Buddhists and Hindus. The most important crop is maize. There are several trade routes through Sikkim from Darjiling District into Tibet. In the convention of 1890 provision was made for the opening of a trade route, but the results were disappointing, and the failure of the Tibetans to fulfil their obligations resulted in 1901 in the despatch of a mission to Lhasa, where a new convention was signed. Trade with the British has increased in recent years, and in 1911-12 reached total value of 24 lakhs. A number of good roads have been constructed in recent years. The present ruler, His Highness Maharajah Tashi Namgyal, who was born in 1893 and succeeded in 1914. The Political Officer stationed at Gangtok advises and assists the Maharajah and his Council. The average revenue is Rs. 2,85,000.

Political Officer in Sikkim—C. A. Bell, G. C. S. I.

Bhutan

Bhutan extends for a distance of approximately 190 miles east and west along the southern slopes of the central axis of the Himalayas, adjacent to the northern border of Eastern Bengal and Assam. Its area is 18,000 square miles and its population, consisting of Buddhists and Hindus, has been estimated at 300,000. The country formerly belonged to a tribe called Tokpa, but was wrested from them by some Tibetan soldiers about the middle of the seventeenth century. British relations with Bhutan commenced in 1772 when the Bhotias invaded the principality of Cooch Behar and British aid was invoked by that State. After a number of raids by the Bhutanese into Assam, an envoy (the Hon. A. Eden) was sent to Bhutan, who was grossly insulted and compelled to sign a treaty surrendering the Duars to Bhutan. On his return the treaty was disallowed and the Duars annexed. This was followed by the treaty of 1865, by which the State's relations with the Government of India were satisfactorily regulated. The State formerly received an allowance of half a lakh a year from the British Government in consideration of the cession in 1865 of some areas on the southern borders. This allowance was doubled by a new treaty concluded in January 1910, by which the Bhutanese Government bound itself to be guided by the advice of the British Government in regard to its external relations, while the British Government undertook to exercise no interference in the internal administration of Bhutan. On the occasion of the Tibet Mission of 1904, the Bhotias gave strong proof of their friendly attitude. Not only did they consent to the survey of a road through their country to Chumbi, but their ruler, the Tongsa Penlop, accompanied the British troops to Lhasa, and assisted in the negotiations with the Tibetan authorities. For these services he was made a G. C. I. E., and he has since entertained the British Agent hospitably at his capital. The ruler is now known as H. H. the Maharaja of Bhutan, Sir Ugyen Wangchuk, G. C. S. I., G. C. I. E. At the head of the Bhutan Government, there are nominally two supreme authorities, the Dharma Raja, known as Shapting Renipoche, the spiritual head, and the Deb or Depa Raja, the temporal ruler. The Dharma Raja is

regarded as a very high incarnation of Buddha, far higher than the ordinary incarnations in a set of which there are several hundreds. On the death of a Dharma Raja a year or two is allowed to elapse and his reincarnation then takes place, always in the Choke, or royal family of Bhutan.

Cultivation is backward and the chief crop is maize. The Military force consists of local levies under the control of the different chiefs. They are of no military value.

Nepal

The kingdom of Nepal is a narrow tract of country extending for about 520 miles along the southern slope of the central axis of the Himalayas. It has an area of about 54,000 square miles with a population of about 5,000,000, chiefly Hindus. The greater part of the country is mountainous, the lower slopes being cultivated. Above these is a rugged broken wall of rock leading up to the chain of snow-capped peaks which culminate in Mount Everest (29,000 feet) and others of slightly less altitude. The country before the Gurkha occupation was split up into several small kingdoms under Newar kings. The Gurkhas under Prithvi Narayan Shah overran and conquered the different kingdoms of Patan, Kathmandu, and Bhatgion, and other places during the latter half of the 18th century and since then have been rulers of the whole of Nepal. In 1846 the head of the Rana family obtained from the sovereign the perpetual right to the office of Prime Minister of Nepal, and the right is still enjoyed by his descendant. In 1850 Jung Bahadur paid a visit to England and was thus the first Hindu Chief to leave India and to become acquainted with the power and resources of the British nation. The relations of Nepal with the Government of India are regulated by the treaty of 1816 and subsequent agreements, but the political status of Nepal is difficult to define. It may be said to stand intermediate between Afghanistan and the Native States of India. The point of resemblance to Afghanistan is in the complete freedom which Nepal enjoys in the management of its internal affairs, while in both countries foreign relations are controlled by the Indian Government. The analogy to the Native States is that, by treaty, Nepal is obliged to receive a British Resident at Katmandu and cannot take

Europeans into service without the sanction of the Indian Government. But, for the reasons above given, the functions of the Resident differ from those that are commonly exercised by Residents at Native Courts.

Nepal is also brought into relations with China, whose nominal suzerainty she acknowledged. It is an influence that weighs light, and consists in the de-pitch, every five years, of a mission with presents to the ruling Emperor. This mission, though it may at one time have carried a certain amount of political significance, has now mainly a trading aspect. Its expenses are paid by the Chinese from the time it crosses the Nepalese frontier, and a brisk trade is carried on throughout the journey.

From the foregoing account of the history of Nepal it will be seen that the Government of the country has generally been in the hands of the Minister of the day. Since the time of Jung Bahadur this system of government has been clearly laid down and defined. The sovereign, or Maharaja Dhuraj, as he is called, is but a dignified figure head, whose position can best be likened to that of the Emperor of Japan during the Shogunate. The real ruler of the country is the Minister who, while enjoying complete monopoly of power, couples with his official rank the exalted title of Maharaja. Next to him comes the Commander-in-Chief, who ordinarily succeeds to the office of Minister. The present Minister at the head of affairs of Nepal is Maharaja Sir Chandra Shum Shere Jung Bahadur Rana, G C B, G C S I, G C V O, D C L and Honorary Major General in the British Army. He has been Prime Minister and Marshal of Nepal since June, 1901.

Rice, wheat and maize form the chief crops in the lowlands. Mineral wealth is supposed to be great, but, like other sources of revenue, has not been developed. Communications in the State are primitive. The revenue is about two crores of rupees per annum. The standing army is estimated at 45,000, the high posts in it being filled by relations of the Minister. The State is of considerable archaeological interest and many of the sites connected with scenes of Buddha's life have been identified in it by the remains of inscribed pillars.

Resident Lieut.-Col J Manners Smith, V C G C V O, C I E

NORTH-WEST FRONTIER STATES.

The Native states of the North-West Frontier Provinces are Amb, Chitral, Dir, Nawaga (Bajaur), and Phulera. The total area is about 7,704 square miles and the population, mainly Mahomedan, is 1,622,094. The average annual revenue of the first four is about Rs 4,65,000, that of Phulera is unknown.

Amb—Is only a village on the western bank of the Indus in Independent Tanawal.

Chitral—Runs from Dir to the south of the Hindu-Kush range in the north, and has an area of about 4,500 square miles. The ruling dynasty has maintained itself for more than three hundred years, during the greater part of which the State has constantly been at war with its neighbours. It was visited in 1885 by the Lockhart Mission, and in 1889, on the establishment of a political agency in Gilgit, the ruler

of Chitral received an annual subsidy from the British Government. That subsidy was increased two years later on condition that the ruler, Amam-ul-Mulk, accepted the advice of the British Government in all matters connected with foreign policy and frontier defence. His sudden death in 1892 was followed by a dispute as to the succession. The eldest son Nizam-ul-Mulk was recognised by Government, but he was murdered in 1895. A religious war was declared against the infidels and the Agent at Gilgit, who had been sent to Chitral to report on the situation, was besieged with his escort and a force had to be despatched (April 1895) to their relief.

The three valleys of which the State consists are extremely fertile and continuously cultivated. The internal administration of the

country is conducted by the Mehtar, and the foreign policy is regulated by the Political Agent

Dir—The territories of this State, about 5,000 square miles in area, include the country drained by the Panjkora and its affluents down to the junction of the former river with the Bajaur or Rud, and also the country east of this from a point a little above Tirah in Upper Swat down to the Dush Khel Country, following the right bank of the Swat river throughout. The Khan of Dir is the overlord of the country exacting allegiance from the petty chiefs of the clans. Dir is mainly held by Yusufzal Pathans, the old non-Pathan inhabitants being now confined to the upper portion of the Panjkora Valley known as the Bashkar.

Bajaur—Nawagai is a tract of country

included in the territories collectively known as Bajaur which is bounded on the north by the Panjkora river, on the east by the Utman Khel and Mohmand territories and on the west by the watershed of the Kuna river which divides it from Afghanistan. The political system, if it can be termed system, is a communal form of party government, subject to the control of the Khan of Nawagai, who is nominally the hereditary chief of all Bajaur. Under him the country is divided into several minor Khanates, each governed by a chieftain, usually a near relative of the Khan. But virtually the authority of the chieftains is limited to the rights to levy tithe, or *ushar* when they can enforce its payment, and to exact military service if the tribesmen choose to render it.

Political Agent for Dir, Sical and Chitral
Major W J Keen

NATIVE STATES UNDER LOCAL GOVERNMENTS.

The Madras Presidency includes 5 Native States covering an area of 10,087 square miles. Of these the States of Travancore and Cochin represent ancient Hindu dynasties. Pudukottai is the inheritance of the chieftain called the Tondiman. Banganapalle and Sandur, two petty States, of which the first is ruled by a Nawab, lie in the centre of two British districts

Name	Area sq miles	Population	Approx Revenue in lakhs of rupee
Travancore	7,120	3,428,975	128
Cochin	1,361	918,110	47
Pudukottai	1,178	411,878	16
Banganapalle	255	39,356	2.8
Sandur	161	13,517	1.7 1.2

Travancore—This State occupies the south-west portion of the Indian Peninsula, forming an irregular triangle with its apex at Cape Comorin. The early history of Travancore is in great part traditional, but there is little doubt that H. H. the Maharaja is the representative of the Chera dynasty, one of the three great Hindu dynasties which exercised sovereignty at one time in Southern India. The petty chiefs, who had subsequently set up as independent rulers within the State, were all subdued, and the whole country, included within its present boundaries, was consolidated and brought under one rule, by the Maharaja Marthanda Varma (1729-58). The English first settled at Anjengo, a few miles to the north of Trivandrum, and built a factory there in 1684. In the wars in which the East India Company were engaged in Madura and Tinnevely, in the middle of the 18th century, the Travancore State gave assistance to the British authorities. Travancore was reckoned as one

of the staunchest allies of the British Power and was accordingly included in the Treaty made in 1784 between the East India Company and the Sultan of Mysore. To protect the State from possible inroads by Tippu, an arrangement was come to in 1788 with the East India Company, and in 1795 a formal treaty was concluded, by which the Company agreed to protect Travancore from all foreign enemies. In 1805 the annual subsidy to be paid by Travancore was fixed at 8 lakhs of rupees.

The present ruler is His Highness Maharaja Sri Rama Varma, GCSI, GCIE, who was born in 1857 and ascended the masnad in 1885. The government is conducted in his name with the assistance of a Dewan (M. Krishnan Nair). The work of legislation is entrusted to a Council brought into existence in 1888. An assembly known as the Sri Mulam Popular Assembly meets once a year, when its members are able to bring suggestions before the Dewan. The State supports a military force of 1,474 men. Education has advanced considerably in recent years and the State takes a leading place in that respect. The principal food grain grown is rice, but the main source of agricultural wealth is the coconut. Other crops are pepper, areca-nut, jack-fruit and tapioca. Cotton weaving and the making of matting from the coir are the chief industries. The State is well provided with roads, and with a natural system of back-waters, besides canals and rivers navigable for country crafts. Two lines of railways intersect the country, the Cochin-Shoranore in the north-west and the Tinnevely-Quilon passing through the heart of the State. A third line, from Quilon to Trivandrum, is in process of construction. The capital is Trivandrum.

Political Agent, R. A. Graham

Cochin—This State on the west coast of India is bounded by the Malabar District of the Madras Presidency and the State of Travancore. Very little is known of its early history. According to tradition, the Rajas of Cochin hold the territory in right of descent from Cheraman Perumal, who governed the whole country of Kerala, including Travancore and Malabar, as

Viceroy of the Chola Kings about the beginning of the ninth century, and afterwards established himself as an independent Ruler. In 1502, the Portuguese were allowed to settle in what is now British Cochin and in the following year they built a fort and established commercial relations in the State. In the earlier wars with the Zamorin of Calicut, they assisted the Rajas of Cochin. The influence of the Portuguese on the west coast began to decline about the latter part of the seventeenth century, and in 1663 they were ousted from the town of Cochin by the Dutch with whom the Raja entered into friendly relations. About a century later, in 1759, when the Dutch power began to decline, the Raja was attacked by the Zamorin of Calicut, who was expelled with the assistance of the Raja of Travancore. In 1776, the State was conquered by Hyder Ali, to whom it remained tributary and subordinate, and subsequently to his son, Tippu Sultan. A treaty was concluded in 1791 between the Raja and the East India Company, by which His Highness agreed to become tributary to the British Government for his territories which were then in the possession of Tippu, and to pay a subsidy.

His Highness Sir Sri Rama Varmah, GCSI, GCE, who was born in 1852, and who ascended the masnad in 1895, having abdicated in December, 1914. His Highness Sri Rama Varmah who was born on 6th October 1858 succeeded to the throne and was duly installed as Raja on the 21st January 1915. The administration is conducted under the control of the Raja whose chief Minister and Executive Officer is the Dewan (J. W. Bhore). The forests of Cochin form one of its most valuable assets. They abound in teak, ebony, blackwood, and other valuable trees. Rice forms the staple of cultivation. Coconuts are largely raised in the sandy tracts, and their products form the chief exports of the State. Communications by road and backwaters are good, and the State owns a line from Shornore to Ernakulam, the capital of the State and a Forest Steam Tramway used in developing the forests. The State supports a force of 274 men.

Political Agent, A. T. Forbes.

Pudukottai—This State is bounded on the north and west by Trichinopoly, on the south by Madura and on the east by Tanjore. In early times a part of the State belonged to the Chola Kings and the southern part to the Pandya Kings of Madura. Relations with the English began during the Carnatic wars. During the siege of Trichinopoly by the French in 1752, the Tondiman of the time did good service to the Company's cause by sending them provisions, although his own country was on at least one occasion ravaged as a consequence of his fidelity to the English. In 1760 he sent some of his troops to assist Muzummad Yusuf the Company's senior commander, in settling the Madura and Tanjore countries. Subsequently he was of much service in the wars with Haidar Ali. His services were rewarded by a grant of territory subject to the conditions that the district should not be alienated (1806). Apart from that there is no

treaty or arrangement with the Raja. The present ruler is Sri Brihadamba Sri Marthanda Bhairava Tondiman Bahadur, GCE, who is eighth in descent from the founder of the family. He succeeded in 1886. The Collector of Trichinopoly is ex-officio Political Agent for Pudukottai. The administration of the State, under the Raja, is entrusted to a State Council of three members, a Superintendent (Mr J. T. Gwynn, ICS), Dewan, and Councillor. The various departments are constituted on the British India model. The principal food crop is rice. The forests, which cover about one seventh of the State contain only small timber. There are no large industries. The State is well provided with roads, but Pudukottai is the only municipal town in the State.

Political Agent A. L. Vibert.

Banganapalle—This is a small State in two detached portions which in the eighteenth century passed from Hyderabad to Mysore and back again to Hyderabad. The control over it was ceded to the Madras Government by the Nizam in 1800, and subsequently passed through a long period of mismanagement ending in the removal of the Nawab Fatch Ali Khan in 1905. The present ruler is Nawab Sa'id Gulam Ali Khan, a Mahomedan of the Shia Sect, who administers the State with the assistance of the Dewan, Khaja Akbar Husain. The chief food grains grown are rice, wheat and cholam. Roads have recently been constructed and the capital, Banganapalle, is being gradually opened up with broad thoroughfares. The Nawab pays no tribute and maintains no military force. Sericulture, the cultivation, and weaving industries have lately been started in the State by the Superintendent of Industries.

Political Agent, H. A. B. Vernon, ICS.

Sandur—This is a small State situated surrounded by the District of Bellary the Collector of which is the Political Agent. Its early history dates from 1725 when it was founded by an ancestor of the present Raja, a Mahomedan named Siddhaji Rao. It subsequently became a vassal to the Peshwa after which it received a formal title for the State as granted by the Madras Government to one Siva Rao. The present ruler is H. H. Raja Siva Rao, who was born in 1862. The State is administered by the Raja and the Dewan (M. L. P. A. Subbarao Velamuri, ICS). The Raja pays no tribute and maintains no military force. The principal crops are rice, wheat, and cholam. There are small industries in the State.

The minerals of the State are of great interest. The diamond is found in the hills near the southern base of the Western Ghats ridge 150 feet high, which is a part of the system of hills known as the Western Ghats. The diamond is found in the hills near the southern base of the Western Ghats ridge 150 feet high, which is a part of the system of hills known as the Western Ghats. The diamond is found in the hills near the southern base of the Western Ghats ridge 150 feet high, which is a part of the system of hills known as the Western Ghats.

Political Agent, A. L. G. V. V.

UNDER THE GOVERNMENT OF BOMBAY.

More than a half of the total number of the very various units counted as Native States in India are under the Government of Bombay. The characteristic feature of the Bombay States is the great number of petty principalities, the peninsula of Kathiawar alone contains nearly two hundred separate States. The recognition of these innumerable jurisdictions is due to the circumstance that the early Bombay administrators were induced to treat the *de facto* exercise of civil and criminal jurisdiction by a landholder as carrying with it a quasi-sovereign status. As the rule of succession by primogeniture applies only to the larger principalities, the minor states are continually suffering disintegration. In Bombay, as in Central India, there are to be found everywhere the traces of disintegration and disorder left by the eighteenth century. In no part of India is there a greater variety of principalities. The bulk of them are of modern origin, the majority having been founded by Marathas in the general scramble for power in the middle of the eighteenth century, but several Rajput houses date from earlier times. Interesting traces of ancient history are to be found at Sachin, Janjira and Jafarabad, where chiefs of a foreign ancestry, descended from Abyssinian admirals of the Deccan fleets, still remain. A few aboriginal chiefs, Bhils or Kolis, exercise an enfeebled authority in the Dangs and the hilly country that fringes the Mahi and the Narbada rivers.

The control of the Bombay Government is exercised through Political Agents, whose positions and duties vary greatly. In some of the more important States their functions are confined to the giving of advice and the exercise of a general surveillance, in other cases they are invested with an actual share in the administration, while States whose rulers are minors—and the number of these is always large—are directly managed by Government officers. Some of the States are subordinate to other States, and not in direct relations with the British Government, in these cases the status of the feudatories is usually guaranteed by Government. The powers of the chiefs are regulated by treaty or custom, and range downwards to a mere right to collect revenue in a share of a village, without criminal or civil jurisdiction, as in the case of the petty chiefs of Kathiawar.

The native States in the Bombay Presidency number 377. Area 65,761 square miles. Population (1911) 7,411,875. They are divided for administrative purposes into the following agencies—Bijapur Agency, 2 states, Cutch Agency, 1 state, Dharwar Agency, 1 state (Savanur), Kaira Agency, 1 state (Cambay), Kathiawar Agency, 187 states (principal states, Bhavnagar, Dhrangadhra, Gondal, Junagadh, Nawanagar), West Khandesh Agency (20 states), Kolaba Agency, 1 state (Janjira), Kolhapur Agency, 9 states (principal state, Kolhapur, with 9 feudatory states), Mahi Kantha Agency, 51 states (principal state, Idar), Nasik Agency, 1 state ((Surgana), Palanpur Agency, 17 states (principal state, Palanpur), Poona Agency, 1 state (Bhor),

Rewa Kantha Agency, 62 states (principal state, Rajpipla), Satara Agency, 2 states, Savantvadi Agency, 1 state, Sholapur Agency, 1 state, Sukkur Agency, 1 state (Khalapur), Surat Agency, 17 states, Thana Agency, 1 state (Janhar). The table below gives details of the area, etc. of the more important States—

State	Area in sq miles	Popu- lation	Approx Revenue in lakhs of rupees
Bhavnagar	2,860	441,367	17
Cutch	7,016	513,429	25
Dhrangadhra	1,156	79,142	12
Gondal	1,024	161,916	15
Idar	1,609	202,811	6
Junagadh	3,284	434,222	26
Khairpur	6,050	223,788	15
Kolhapur	3,165	833,441	57
Nawanagar	3,791	349,400	22
Palanpur	1,750	226,250	5
Rajpipla	1,517	161,588	9

Bijapur Agency—This comprises the Satara jaghir of Jath and the small state of Daphlapur (total area 980 square miles), the latter (which has an area of 96 square miles) being an integral part of the State of Jath to which it will lapse on the demise of the present Rani, the widow of the late chief. On the annexation of Satara, in 1849, Jath and Daphlapur, like other Satara Jagirs, became feudatories of the British Government. The latter has more than once interfered to adjust the pecuniary affairs of the Jath Jagir, and in consequence of numerous acts of oppression on the part of the then ruler, was compelled to assume direct management from 1874 to 1885. The Chief of Jath, who belongs to the Maratha caste, is a Treaty Chief and ranks as a first class Sardar. He is styled Deshmukh. He holds a sanad of adoption, and the succession follows the rule of primogeniture. The small State of Daphlapur is managed by a Rani, aided by her *karbhari*. The gross revenue of the Agency is about 3 lakhs chiefly derived from land revenue. The Jath State pays to the British Government Rs. 6,400 per annum in lieu of a horse contingent and Rs. 4,340 on account of Sardeshmukhi rights.

Political Agent, Jahangir Kalkhosru Navroji Kabraji, Collector of Bijapur

Cutch—The State is bounded on the north and north-west by Sind, on the east by the Palanpur Agency, on the south by the Peninsula of Kathiawar and the Gulf of Cutch and the south-west by the Indian Ocean. Its area, exclusive of the great salt marsh called the Rann of Cutch, is 7,016 square miles. The capital is Bhuj, where the ruling Chief (the Rao) His Highness Maha Rao Sri Ishengarji Saval Baidur, G.O.B.E., resides. From its isolated position, the special character of its people, their peculiar dialect, and their strong feeling of personal loyalty to their ruler, the peninsula of Cutch has more of the elements of a distinct nationality than any other of the dependencies of Bombay. The earliest historic notices of the State occur in the Greek writers. Its modern

History date from its conquest by the Sind tribe of Samra Rajputs in the fourteenth century. The nation of the Samras forming the ruling family in Cutch were known as the Jadeja or children of Jada. The British made a treaty with the State in 1815 but three years after the conduct of the ruler made it necessary to occupy the capital and depose him. There is a fair proportion of good arable soil in Cutch, and wheat, barley and cotton are cultivated. Both iron and coal are found but are not worked. Cutch is noted for its beautiful embroidery and silverwork and its manufactures of silk and cotton are of some importance. Trade is chiefly carried by sea. The ruling chief is the supreme authority. A few of the Bhavads are invested with jurisdictional powers in varying degrees in their own States and over their own vassals. A notable fact in connection with the administration of the Cutch State is the number and position of the Bhavad. These are Rajput nobles forming the brotherhood of the Rao. They were granted a share in the territories of the ruling chief as provision for their maintenance and are bound to furnish troops on an emergency. The number of these chiefs is 157 and the total number of the Jadeja tribe in Cutch is about 16,000. The British military force having been withdrawn from Bhuj the State now pays Rs. 82,257 annually to the British Government. The military force consists of about 1,000 in addition to which there are some irregular infantry and the Bhavads could furnish on requisition a mixed force of four thousand.

Political Agent, Major R. S. Pottinger

Dharwar Agency—This comprises only the small State of Savanur. The founder of the reigning family who are Mahomedans of Pathan origin was a jagirdar of Emperor Aurangzeb. At the close of the last Maratha War the Nawab of Savanur whose conduct had been exceptionally loyal was confirmed in his possessions by the British Government. The State pays no tribute. The principal crop is cotton. The area is 70 square miles and population 17,900. The revenue is about one lakh. The present chief is Abdul Majid Khan Dilljyang Bahadur.

Political Agent, J. A. G. Wales, I. C. S.

Kaira Agency—This includes only the State of Cambay at the head of the Gulf of the same name. Cambay was formerly one of the chief ports of India and of the Anhilwada Kingdom. At the end of the thirteenth century it is said to have been one of the richest towns in India, and at the beginning of the sixteenth century also it formed one of the chief centres of commerce in Western India. Factories were established there by the English and the Dutch. It was established a distinct State about 1730, the founder of the present family of Chiefs being the last but one of the Mahomedan Governors of Gujarat. The present Nawab is His Highness Mirza Hussein Yarir Khan who is a Shiah Mogul of the Najum-ul-Mulk of Persia, and was born on the 16th May 1911. His father, the late Nawab Jufar Ali Khan, died on 21st January 1915, leaving him a minor. The State is then under British Administration. The State pays a tribute of Rs. 21,924 to the British Government. Wheat and cotton are the principal crops. There is a broad gauge line from Cambay to Patlad, connecting with

the B. B. & C. I. Railway at Anand. Cambay is a first class State having full jurisdiction. Revenue is about six lakhs. The area of the State is 550 square miles, population 2,656.

Political Agent, J. G. H. I. C. S.

Kathliawar Agency—Kathliawar is the peninsula or western portion of the Province of Gujarat, Bombay. Its extreme length is about 220 miles and its greatest breadth about 165 miles, the area being 23,445 square miles. Of this total about 20,882 square miles with a population of 2,496,057 is the territory forming the Political Agency subordinate to the Government of Bombay, established in 1822, having under its control nearly 200 separate States whose chiefs divided amongst themselves the greater portion of the peninsula. The Kathliawar Agency is divided for administrative purpose into four prants or divisions—Jhalawar, Halar, Sorath and Gohelwar—and the States have since 1863 been arranged in seven classes. Since 1822 political authority in Kathliawar has been vested in the Political Agent subordinate to the Government of Bombay. In 1902 the designations of the Political Agent and his Assistants were changed to those of Agent to the Governor and Political Agents of the prants. Before 1863, except for the criminal court of the Agent to the Governor, established in 1831, to aid the Darbars of the several States in the trial of heinous crimes, interference with the judicial administration of the territories was diplomatic, not magisterial, and the criminal jurisdiction of the first and second-class chiefs alone was defined. In 1863, however, the country underwent an important change. The jurisdiction of all the chiefs was classified and defined, that of chiefs of the first and second classes was made plenary, that of lesser chiefs was graded in a diminishing scale. The four Political Agents of the prants resident in the four divisions of Kathliawar, now exercise residuary jurisdiction with large civil and criminal powers. Each Political Agent of a prant has a deputy, who resides at the headquarters of the prant or division, and exercises subordinate civil and criminal powers. Serious criminal cases are committed by the deputies to the court of the Agent to the Governor, to whom also civil and criminal appeals lie. The Agent to the Governor is aided in this work by an officer known as the Political Agent and Judicial Assistant who is usually a member of the Indian Civil Service. Appeals from his decisions lie direct to the Governor of Bombay in Council in his executive capacity. Two Deputy-Assistants also help the Agent.

Agent to the Governor in Kathliawar, J. S. Eden.

Bhavnagar—This State lies at the head and west side of the Gulf of Cambay. The Gohel Rajputs, to which tribe the Chief of Bhavnagar belongs, are said to have settled in the country about the year 1260, under Sojakji from whose three sons—Ranoji, Saranji and Shahji—are descended respectively the chiefs of Bhavnagar, Lathi and Palitana. An intimate connexion was formed between the Bombay Government and Bhavnagar in the eighteenth century when the chief of that State took pains to destroy the pirates which infested the neighbouring seas. The State was split up between Gujarat and Kathliawar were d

Peshwa

the Gackwar, but the various claims over Bhavnagar were consolidated in the hands of the British Government in 1807. The State pays an annual tribute of Rs. 1,28,000 to the British Government, Rs. 3,581-8-0 as Peshkash to Baroda and Rs. 22,858 as Zortalbi to Junagadh. H. H. Maharaja Rao Shri Bhavsinhji, K. S. I., is the supreme and final authority in the State. The general administration is conducted under His Highness's directions by the Dewan (M. A. Tana, Acting Dewan) who is assisted by the Naib Dewan, the Personal Assistant and the Judicial Assistant. One noteworthy feature in the administration is the complete separation of judicial from executive functions and the decentralisation of authority is another. The authority and powers of all the Heads of Departments have been clearly defined, and each within his own sphere is independent of the others, being directly responsible to the Dewan.

The chief products of the State are grain, cotton and salt. The chief manufactures are oil, copper and brass vessels and cloth. The Bhavnagar State Railway is 205 miles in length, and the management of it undertakes also the working of the Dhrangadhra State Railway for a length of 21 miles. The capital of the State is the town and port of Bhavnagar, which has a good and safe harbour for shipping and carries on an extensive trade as one of the principal markets and harbours of export for cotton in Kathiawar. Bhavnagar supports 300 Imperial Service Lancers and 282 Infantry or Armed Police.

Dhrangadhra State is an uneven tract of land (intersected by small streams) which consists of hilly and rocky ground where stone is quarried. The chief of Dhrangadhra belongs to the Jhala tribe, originally a sub-division of the Makvana family. This tribe is of great antiquity, and is said to have entered Kathiawar from the north establishing itself first at Patri in the Ahmedabad District, thence moving to Halvad and finally settling in its present seat. The greater part of this territory was probably annexed at one time by the Mahomedan rulers of Gujarat. Subsequently, during the reign of the Emperor Aurangzebe (1658-1707), the sub-division of Halvad, then called Nulhamadnagar, was restored to the Jhala family. The petty States of Limbdi, Wadhwan, Chuda, Sayla, and Than-Lakhtar in Kathiawar are offshoots from Dhrangadhra, and the house of Wankaner claims to be descended from an elder branch of the same race. His Highness the Maharaja Shri Ghanshyamsinhji is the ruling chief, who is the head of the Jhala Rajput family. The State pays a tribute of Rs. 40,671 to the British Government, and Rs. 4,006 to Junagadh State. The administration is conducted under the Maharaja's directions by the Dewan (Mansinh S. Jhala). The principal crops are cotton and grain. The Capital town is Dhrangadhra, a fortified town, 75 miles west of Ahmedabad.

Gondal State—The Chief of Gondal is a Rajput of the Jadeja stock with the title of Thakur Sahib, the present Chief being Sir Bhagvat Sinhji, G. C. I. E. The early founder of the State, Kumbhoji I, had a modest estate of 20 villages. Kumbhoji II, the most powerful Chief of the House, widened the territories to

almost their present limits by conquest, but it was left to the present ruler to develop its resources to the utmost and in the words of Lord Reay, Governor of Bombay, by its "importance and advanced administration" to get it recognised as a First Class State. The State pays a tribute of Rs. 1,10,721. The chief products are cotton and grain and the chief manufactures are cotton and woollen fabrics and gold embroidery. Gondal has always been pre-eminent amongst the States of its class for the vigour with which public works have been prosecuted, and was one of the earliest pioneers of railway enterprise in Kathiawar, having initiated the Dhasa-Dhoraji line. It subsequently built other lines in partnership with other Native States in Kathiawar. The Capital is Gondal, a fortified town on the line between Rajkot and Jetalsar.

Junagadh State—This State has an area of 3,284 square miles and is bounded on the north by the Barda and Halar and on the west and south by the Arabian Sea. The river Saraswati, famous in the sacred annals of the Hindus, passes through the State. A densely wooded tract called the Gir, is contained in the State and is well known as the last haunt in India of the lion. Until 1472, when it was conquered by Sultan Mahmud Begra of Ahmedabad, Junagadh was a Rajput State, ruled by Chiefs of the Chudasama tribe. During the reign of the Emperor Akbar it became a dependency of Delhi, under the immediate authority of the Mughal Viceroy of Gujarat about 1735, when the representative of the Mughals had lost his authority in Gujarat. Sher Khan Babi, a soldier of fortune, expelled the Mughal Governor, and established his own rule. The ruler of Junagadh first entered into engagements with the British Government in 1807. The Chief bears the title of Nawab, the present Nawab being tenth in succession from the founder of the family. He is His Highness Mahabat Khan, who was born in 1900 and succeeded in 1911. The agricultural products are cotton, shipped in considerable quantities from Veraval to Bombay, wheat and other grains. The coast line is well supplied with fair weather harbours. The State pays a tribute of Rs. 65,604 to the Gackwar of Baroda and the British Government, but the Nawab receives contributions, called zortalbi, amounting to Rs. 92,421 from a number of chiefs in Kathiawar—a relic of the days of Mahomedan supremacy. The State maintains 100 Imperial Service Lancers. The Capital is Junagadh, situated under the Girnar and Datar hills, which is one of the most picturesque towns in India, while in antiquity and historical interest it yields to none. The Uparkot, or old citadel, contains interesting Buddhist caves, and the whole of the ditch and neighbourhood is honeycombed with caves or their remains. There are a number of fine modern buildings in the town.

Administrator, H. D. Rendall, I. C. S.

Navanagar State, on the southern shore of the Gulf of Cutch, has an area of 3,791 square miles. The Jam of Navanagar is a Jadeja Rajput by caste, and belongs to the same family as the Rao of Cutch. The Jadejas originally entered Kathiawar from Cutch, and dispossessed the ancient family of Jethwas.

(probably a branch of Jats) then established at Ghumli. The town of Navanagar was founded in 1540. The present Jam Sahib is the well-known cricketer, H. H. Jam Sahib Shri Ranjitsinhji Vibhaji, who was born in 1872 and succeeded in 1907. The principal products are grain and cotton, shipped from the ports of the State. A small pearl fishery lies off the coast. The State pays a tribute of Rs 1,20,093 per annum jointly to the British Government, the Gaekwar of Baroda and the Nawab of Junagadh. The State maintains a squadron of Imperial Service Lancers. The Capital is Navanagar (or Jamnagar) a flourishing place, nearly 4 miles in circuit, situated 5 miles east of the port of Bedi. Population, 349,400. Revenue nearly Rs 40 lakhs.

Administrator, during the absence of His Highness at the front, Major Berthon.

Deewan, K. B. Merwanji Pestonji.

Kolaba Agency.—This Agency includes the State of Janjira in the Konkan, a country covered with spurs and hill ranges and much intersected by creeks and backwaters. The ruling family is said to be descended from an Abyssinian in the service of one of the Nizam Shahi Kings of Ahmednagar at the end of the fifteenth century. The most noticeable point in its history is the successful resistance that it alone, of all the states of Western India, made against the determined attacks of the Marathas. The British on succeeding the Marathas as masters of the Konkan refrained from interfering in the internal administration of the State. The chief is a Sunni Mahomedan by race a Sidi or Abyssinian, with a title of Nawab. He has a sanad guaranteeing succession according to Mahomedan law and pays no tribute. Till 1803 the State enjoyed singular independence, there being no Political Agent, and no interference whatever in its internal affairs. About that year the mal-administration of the chief, especially in matters of police and criminal justice, became flagrant; those branches of administration were in consequence taken out of his hands and vested in a Political Agent. The present ruler is H. H. Nawab Sidi Sir Ahmed Khan, G.C.L.E., who was born in 1862. The area of the State is 377 square miles, and the population 101,150. The average revenue is

6 lakhs. The State maintains a military force of 228 and an Imperial Service detachment of 29. The capital is Janjira, 44 miles south of Bombay Island. The Chief exercises full powers in Criminal, Civil and Revenue matters of the State including Jagarabad, dependency of the Janjira State in Kathiawar. He is entitled to a dynastic salute of 11 guns.

Kolhapur Agency.—Kolhapur is a State with an area of 3,217 square miles and population of 833,441. Subordinate to Kolhapur are nine feudatories, of which the following five are important: Vishalgad, Bida, Kagal (senior), Kapsi and Ichalkaranji. The present ruling chief Sir Shahu Chhatrapati Maharaja, G.C.S.I., G.C.I.F., G.C.V.O., traces his descent from a younger son of Shivaji founder of the Maratha power. The prevalence of piracy from the Kolhapur port of Malvan compelled the Bombay Government to send expeditions against Kolhapur in 1705, and again in 1792, when the Raja agreed to give compensation for the losses which British merchants had sustained since 1785, and to permit the establishment of factories at Malvan and Kolhapur. Internal dissensions and wars with neighbouring States gradually weakened the power of Kolhapur. In 1812 a treaty was concluded with the British Government, by which, in return for the cession of certain ports, the Kolhapur Raja was guaranteed against the attacks of foreign powers, while on his part he engaged to abstain from hostilities with other States, and to refer all disputes to the arbitration of the British Government. The principal articles of production are rice, jawar and sugar-cane and the manufactures are coarse cotton and woollen cloths, pottery and hardware. The State pays no tribute, and supports a military force of 600. The nine feudatory estates are administered by their holders. Except in the case of two whose holders are minors Kolhapur proper is divided into six pethas or talukas and four mahals and is managed by the Maharaja who has full powers of life and death. The Southern Mahratta Railway passes through the State and is connected with Kolhapur City by a line which is the property of the State.

Resident and Senior Political Agent for Kolhapur and the Southern Mahratta Country.—Lt Col F. W. Woodhouse, C.I.E.

Southern Maratha Country States.—The Agency consists of the following eight States:—

Name of State	Area in square miles	Population	Tribute to British Government	Average Revenue
Sangli	1,112	227,146	Rs 1,20,000	Rs 10,75,776
Miraj (Senior)	339	80,281	12,537	3,12,000
Miraj (Junior)	210	26,490	7,388	2,35,200
Kurundwad (Senior)	185	38,375		1,45,000
Kurundwad (Junior)	114	34,034	9,018	1,75,000
Bamkhandi	524	100,004	20,515	6,45,000
Mudhol	68	62,811	2,471	2,52,000
Ramdruc	169	57,610		1,50,000
Total	3,021	616,121	1,87,750	28,76,776

Mahi Kantha—This group of States has a total area of 3,124 square miles and a population of 412,631. The revenue is about 14 lakhs. The Agency consists of the first class State of Idar and 62 small States. The Native State of Kār covers more than half the territory, eleven other States are of some importance, and the remainder are estates belonging to Rajput or Koli Thakurs, once the lawless feudatories of Baroda, and still requiring the anxious supervision of the Political Officer. H. H. Major General Sir Partab Singh, a Rajput of the Rathor Clan, having been appointed regent of the State of Jodhpur, resigned the gadi of Idar in June 1911 and was succeeded by his adopted son Daulatsinhji. Many relatives of the Maharaja and feudal chiefs whose ancestors helped to secure the country for the present dynasty, now enjoy large estates on service tenures, and there are numerous petty chiefs or *bhunas* who have held considerable estates from the time of the Raos of Idar, or earlier, and are under no obligation of service. The revenues of the State are shared by the Maharaja with these feudal chiefs. The Maharaja receives Rs 52,427 annually on account of Khichdi and other Raj Haks from its subordinate Sardars, the tributary Talukas of the Mahi Kantha Agency and others, and pays Rs 30,340 as tribute to the Gaekwar of Baroda through the British Government. The subordinate Sardars of Idar, known locally as *patiwats*, hold their estates on condition of military service, the quota being three horse-men for every 1,000 Rupees of Revenue, but for many years this service has not been exacted and no military force is maintained at present.

Political Agent—Lt.-Col. J. R. B. Graham Carter

Nasik Agency—This consists of one State Surgana, lying in the north-west corner of the Nasik District. Surgana has an area of 360 square miles and a population of 15,180. The ruling chief is Prataprav Shankarrao Deshmukh, who is descended from a Maratha Pawar family. He rules the State subject to the orders of the Collector of Nasik. The revenue of the State is about Rs 23,000.

Palanpur Agency—This group of States in Gujarat comprises two first class States, Palanpur and Radhanpur, and a few minor States and petty talukas. Its total area is 6,393 square miles and the population is 515,092. The gross revenue is about 14½ lakhs. The territory included in the Agency has, like the more central parts of Gujarat, passed during historical times under the sway of the different Rajput dynasties of Anhilvada, the early Khilji and Tughlak Shahi dynasties of Delhi, the Ahmedabad Sultans, the Mughal Emperors, the Marhattas, and lastly the British. The State from which the Agency takes its name is under the rule of H. H. Nawab Sher Muhammad Khan, G.C.I.E., who is entitled the Dewan of Palanpur. He is descended from the Lohanis, an Afghan tribe who appeared in Gujarat in the fourteenth century. The connection of the British Government with the State dates from 1819 in which year the chief was murdered by a body of nobles. Two high roads from Ahmedabad pass through

the State and a considerable trade in cotton cloth, grain, sugar and rice is carried on. The State maintains a military force of 600 and pays tribute of Rs 78,000 to the Gaekwar of Baroda. The capital is Palanpur situated at the junction of the Palanpur-Dessa Branch of the B. B. & C. I. Railway. It is a very old settlement of which mention was made in the eighth century.

Political Agent—Major N. S. Coghlin

Radhanpur is a State, with an area of 1,150 square miles, which is now held by a branch of the Babi family, who since the reign of Humayun have always been prominent in the annals of Gujarat. The present chief is H. H. Jalal-ud-din Khanji, the Nawab of Radhanpur. He has powers to try his own subjects even for capital offences without permission from the Political Agent. The State maintains a military force of 200. The principal products are cotton, wheat and grain. The capital is Radhanpur town, a considerable trade centre for Northern Gujarat and Cutch.

Rewa Kantha Agency—This Agency, with an area of 4,038 square miles and a population of 685,000, comprises 61 States, of which Rajppla is a first class State, 5 are second class, one is third class and the rest are either petty States or talukas. Among those petty States are Kadana and Sanjeli in the north, Bhadarva and Umata in the west, Narukot in the south-east, and three groups of Mehwas. The 26 Sankheda Mehwas petty estates lie on the right bank of the Narbada, while the 24 Pandu Mehwas petty estates including Dorka, Anghad and Raika, which together form the Dorka Mehwas are situated on the border of the Mahi.

The following are the statistics of area and population for the principal States—

Taluka or Petha	Area in square miles	Population
Balasnor	189	40,563
Bariya	813	115,350
Chhota Udaipur	873	103,639
Lunavada	388	75,998
Narukot (Jambhughoda)	143	8,485
Rajppla	1,517	161,588
Sunth	394	50,350
Other Jurisdictional States, Civil Stations and Thana Circles	639	100,126

Under the first Anhilvada dynasty (746-961), almost all the Rewa Kantha lands except Champaner were under the government of the Baniyas, that is, Koli and Bhil chiefs. In the eleventh, twelfth and thirteenth centuries chiefs of Rajput or part Rajput blood, driven south and east by the pressure of Muhammadan invasions, took the place of the Koli and Bhil leaders. The first of the present States to be established was the house of the Raja of Rajppla.

Political Agent—J. P. Brander.

Surat Agency—This is a small group of three second class States under the superintendence of the Collector of Surat, W. F. Hudson

State.	Ruling Chiefs.	Area in sq miles	Population
Dharmpur	Maharana Shri Mohandevji Narayandevji	6701	114,995
Bansda	Maharaja Shri Indrasinhji Pratapsinhji	215	44,504
Sachin	Nawab Siddi Ibrahim Muhammad Yakut Khan Mubazarat Daula Naerat Jung Bahadur	12	18,903

The joint revenue of these states is 16½ lakhs. Tribute is paid to the British Government of Rs. 9,154. There is also attached to this Agency a tract of country known as the Dangs, which has an area of 999 square miles and a population of 29,353 and a revenue of Rs. 30,000. The country is divided into 14 Dangs or States of very unequal area, each under the purely nominal rule of a Bhil Chief with the title of Raja, Naik, Pradhan or Powar.

Thana Agency—This includes the State of Jawhar, in the Thana District, on a plateau above the Konkan plain. It has an area of 310 square miles and a population of 53,489

and revenue of 2 lakhs. Up to 1291, the period of the first Mahomedan invasion of the Decan, Jawhar was held by a Varli, not a Koli chief. The first Koli chief, obtained his footing in Jawhar by a device similar to that of Dido, when she asked for and received as much land as the hide of a bull would cover. The Koli chief cut a hide into stripes, and thus enclosed the territory of the State. The present chief is Raja Kri-hnashah Patangshah who administers the State, assisted by a Karbhari under the supervision of the Collector of Thana, S. M. Bharucha, who is Political Agent of the State.

UNDER THE GOVERNMENT OF BENGAL

Cooch Behar—This State is a low-lying plain in North Bengal. It has an area of 1,307 square miles, a population of 5,93,052 and revenue of 27 lakhs. The ruling chief is H. H. Maharaja Itendra Narayan Bhup Bahadur, who succeeded in 1913. His family is of Tibetan or Dravidian origin. He administers the State with the assistance of the State Council. Cooch Behar once formed part of the famous kingdom of Kamarupa. British connexion with it began in 1772 when the succession was disputed and the assistance of the East India Company invited. The chief products of the State are rice, jute and tobacco. It maintains a military force of 194. The capital is Cooch Behar which is reached by the Cooch Behar State Railway, a branch from the Eastern Bengal State Railway System.

Hill Tippera—This State lies to the south of the district of Sylhet and consists largely of hills covered with bamboo jungles. It has an area of 4,036 square miles and a population of 229,613. The revenue from the State is about 10 lakhs and from the Zemindari in British territory a slightly smaller sum. The present Raja is Birendra Kishore Deb Barman Manikya, who is a Kshatriya by caste and comes of the Lunar race. The military

prestige of the Tippera Rajas dates back to the fifteenth century and a mythical account of the State takes the history to an even earlier date. Both as regards its constitution and its relations with the British Government, the State differs alike from the large Native States of India, and from those which are classed as tributary. Besides being the ruler of Hill Tippera, the Raja also holds a large landed property called Chakla Roshnabad, situated in the plains of the Districts of Tippera, Nao-khali and Sylhet. This estate covers an area of 600 square miles, and is held to form with the State an indivisible Raj. Disputes as to the right of succession have occurred on the occasion of almost every vacancy in the Raj, producing in times gone by disturbances and domestic wars and exposing the inhabitants of the hills to serious disorders and attacks from the Kukis, who were always called in as auxiliaries by one or other of the contending parties. The principles which govern succession to the State have recently, however, been embodied in a sanad which was drawn up in 1904. The chief products of the State are rice and cotton, the traffic being carried chiefly by water. The administration is conducted by the Minister at Agartala assisted by the Dewan.
Political Agent J. Bartlett, I.C.S.

UNDER THE GOVERNMENT OF BIHAR AND ORISSA

Under this Government there are the Chota Nagpur political States of Kharsawan and Seraikela, and the Orissa feudatory States, 24 in number. The total area is 28,648 square miles, and the total population 3,942,972. The revenue is about 54 lakhs. The inhabitants are hill-men of Kolarian or Dravidian origin, and their condition is still very primitive. The chief of Kharsawan belongs to a junior branch of the Porabhat Raja's family. The State first came under the notice of the British in 1793, when, in consequences of disturbances on the

frontier of the old Jungle Mahals, the Thakur of Kharsawan and the Kunwar of Sarakela were compelled to enter into certain agreements relating to the treatment of fugitive rebels. The chief is bound, when called upon, to render service to the British Government, but he has never had to pay tribute. His present sanad was granted in 1899. He exercises all administrative powers, executive and judicial, subject to the control of the Deputy Commissioner of Singhbhum and the Commissioner of Chota Nagpur. The Bengal Nagpur Rail-

Surat Agency—This is a small group of three second class states under the supervision of the Collector of Surat, W. R. Hudson

State	Ruling Chiefs	Area in sq miles	Population
Dharampur	Maharaja Shri Mohandevji Narayandevji	9701	114,995
Banda	Maharaj Shri Indrasimhi Pratapsimhi	215	44,591
Sachin	Navab Sidi Ibrahim Muhammad Yakut Khan Mubazarat Daula Nasrat Jung Bahadur	12	18,903

The joint revenue of these states is 16½ lakhs. Tribute is paid to the British Government of Rs. 9,54½. There is also attached to this Agency a tract of country known as the Dangas, which has an area of 999 square miles and a population of 29,338 and a revenue of Rs. 30,000. The country is divided into 14 Dangas or States of very unequal area, each under the purely nominal rule of a Bhil Chief with the title of Raja, Nalk, Pradhan or Povan. Thana Agency—This includes the State of Jawhar, in the Thana District, on a plateau above the Konkan plain. It has an area of 310 square miles and a population of 53,439. It is Bharnu, who is Political Agent at the

UNDER THE GOVERNMENT OF BENGAL

Cooch Behar—This State is a low-lying plain in North Bengal. It has an area of 1,307 square miles, a population of 5,93,052 and revenue of 27 lakhs. The ruling chief is H. H. Maharaja Barendra Narayan Bhup Bahadur, who succeeded in 1913. His family is of Tibetan or Dravidian origin. He administers the State with the assistance of the State Council. Cooch Behar once formed part of the famous kingdom of Kamrupa. British connection with it began in 1772 when the of the East India Company invited the State are rice, jute and tobacco. It maintains a military force of 194 by the Cooch Behar State Railway, a branch from the Eastern Bengal State Railway. **Hill Tippera**—This State lies to the south of the district of Sylhet and consists largely of hills covered with bamboo jungles. It has an area of 4,086 square miles and a population of 229,613. The revenue from the State is about 10 lakhs and from the Zemindari in British territory a slightly smaller sum. The present Raja is Barendra Kishore Deb Barman of the Lunar race. The military

UNDER THE GOVERNMENT OF BIHAR AND ORISSA

Under this Government there are the Chota Nagpur political States of Kharsawan and Serikela, and the Orissa feudatory States, 24 in number. The total area is 28,648 square miles, and the total population 3,942,972. The revenue is about 54 lakhs. The inhabitants are hill-men of Kolarian or Dravidian origin, and their condition is still very primitive. The chief of Kharsawan belongs to a junior branch of the Porhat Rana's family. The State first came under the notice of the British in 1793, when, in consequence of disturbances on the frontier of the old Jungle Mahals, the Thakur of Kharsawan and the Kunwar of Serikela were compelled to enter into certain agreements relating to the treatment of fugitive rebels. The chief is bound, when called upon, to render service to the British Government, but he has never had to pay tribute. His present squad was granted in 1899. He exercises all administrative powers, executive and judicial, subject to the control of the Deputy Commissioner of Singhbhum and the Commissioner of Chota Nagpur. The Bengal Nagpur Railway

Estates in 1889

Tehri State (or Tehri Garwal)—This State lies entirely in the Himalayas and contains a tangled series of ridges and spurs radiating from a lofty series of peaks on the border of Tibet and the Jumna are in it. The early history of the State is that of Garhwal District, the two tracts having formerly been ruled by the same dynasty. Parduman Shah, the last Raja of the whole territory, was killed in battle, fighting against the Gurkhas, but at the close of the Nepalese War in 1815, his son received from the British the present State of Tehri. During the Mutiny the latter rendered valuable assistance to Government. He died in 1859 without issue, and was succeeded by his near relative Bhawan Shah, and he subsequently received a sanad giving him the right of adoption. The present Raja Sir Kirti Shah, born in 1894. The principal product is rice, grown on terraces on the hill-sides. The State forests are very valuable and there is considerable export of timber. The Raja has full powers within the State, executive authority being vested in an officer called the Wazir. A military force of 113 strong is maintained. The capital is Tehri, the summer capital being Pratapnagar 8,000 feet above the sea level. *Political Agent*—The Commissioner of Kumaon. Benares—The founder of the ruling family of Benares was one Matsa Ram, who entered the service of the Governor of Benares under the Nawab of Oudh in the early eighteenth century. His son, Balaiah Singh, conquered the neighbouring counties and created a big state out of them over which he ruled till 1720.

Name	Area square miles	Popula- tion	Revenue Approx Lacs
Bahawalpur	15,000	780,394	27
Chamb	3,216	134,361	8
Hardikot	642	139,374	7
Jind	1,259	271,728	16
Kapurthala	630	268,344	26
Meer Kotla	167	71,144	4
Mandi	1,200	181,110	5
Nabha	928	248,892	16
Patiala	5,412	1,407,669	72
Sirmur (Nahan)	1,198	138,564	8

The history of Jind as a separate State dates from 1763 when the confederated Sikhs captured Sirhind town and partitioned the whole Jind Province. The Maharaja of Jind, H. H. Maharaja Sir Ranbir Singh, F. C. S. I., was born in 1879 and succeeded in 1887. He is descended from the ancestors of the Phulkian family. During the Sikh War and the Mutiny the Raja of Jind was of great service to the British and was rewarded with a grant of nearly 600 square miles of land. The principal crops are wheat, barley and gram. The only industries of importance are the manufactures of gold and silver ornaments, leather and woodwork and cotton cloth. The capital is Sangur which is connected by a State Railway with the North-Western Railway. The administration of the State is divided between four departments under heads of departments which form together a State Council controlled by the Maharaja.

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(Chamba—This state is enclosed on the west and north by Kashmir on the east and south by the British districts of Kaira and Gandapur and it is shut in on almost every side by four hill ranges. The whole country is mountainous and is a favourite resort of sportsmen. It possesses a remarkable series of copper plate inscriptions from which its rich history have been compiled.

Faridkot.—The ruling family of this sandy level tract of land belongs to the Sidhu-Bairi clan of the Jats, and is descended from the same stock as the Phulian houses. Their occupation of Faridkot and Kot Kapur dates from the time of Akbar, though quarrels with the surrounding Sikh States and internal dissensions have greatly reduced the patrimony. The present chief, H. H. Raja Brijinder Singh Bahadur, was born in 1896 and succeeded in 1906. During his minority the administration is carried on by a council under the presidency of an Extra Assistant Commissioner. The State supports one company of Imperial Service Sappers.

And—The three Native States of Jind, Patiala and Nabha form collectively the Phul-

A small proportion of the population however are Sikhs, the majority being Mohammedans. The chief crops are wheat, gram, maize, cotton and sugar cane. The town of Sultanpur in this State is famous for hand-painted cloths. The main line of the North-Western Railway passes through part of the State and the Great Trunk Road runs parallel to it. A branch railway from Jullundur City to Derowazpur passes through the State. Kapurthala maintains a battalion of Imperial Service Infantry and a small force of local troops. The capital is Kapurthala, which is said to have been founded in the eleventh century.

Agent to the Lieutenant-Governor for Jullundur Division, the Commissioner of the Jullundur

Division

Malot Kotla—This State consists of a level sandy plain bounded by the district of Ludhiana on the north and by Patiala territory elsewhere. The Nawabs of Malot Kotla

are of Afghan descent, and originally held posts of trust in the Sind province under the Moghal Emperors. As the Empire sank into decay during the eighteenth century, the local chiefs gradually became independent.

The result was constant feuds with the adjacent Sikh States. After the victory of Laswari, and the subjugation and flight of Holkar in 1803, gained by the British over Shudha in 1803, the British army, the British Government succeeded to the power of the Malotkots in the districts between the Sutlej and the Juma.

The final treaty which affirmed the dependence of the State on the British Government was signed after the submission of Ranjit Singh in 1809. The present Nawab is II Nwab Ahmad Ali Khan Bahadur, who was born in 1881 and succeeded in 1908. The chief products are cotton, sugar and opium. The State supports one company of Imperial Service Sappers. The capital is Malot Kotla.

Mandi—This is a mountainous State in the upper reaches of the Beas. It has a history of considerable length, as it once formed part of the Suket State. Its relations with the British were determined after the battle of

Sobraon in 1846. The present minor chief II Raj Jogindra Sen was installed in 1913. The administration is carried on by Mr H. W. Emerson, I.O.S., the Superintendent and Sardar Amar Singh. The principal crops are rice, maize, wheat and millet. About three fifths of the State are occupied by forest and grazing lands. It is rich in minerals. The capital is Mandi, founded in 1527, which contains several temples and other buildings of interest and is one of the chief marts for commerce with Ladakh and Yarkhand.

Nabha—Nabha is one of the Pothoharian States. It consists of two distinct parts, the main portion comprising 12 separate pieces of territory scattered among the other two Pothoharian States of Patiala and Jind. The second portion forms the *razmah* of Bawal.

In the extreme south-east of the Punjab it became a separate State in 1763. After the victory of Sobraon, the chief was deposed and for his loyalty during the Mutiny the chief's territory was confiscated.

was rewarded with territory which forms the present Bawal *Razmah*. The present chief is H. II Maharaja Rishidaman Singh Malot. He was born in 1883 and succeeded in 1911. He is assisted in the administration by a council of three members who also acts as a court of appeal. The State supports one battalion of Imperial Service Infantry. The State is traversed by the Western Railway. The Kapurthala Malot Railway crosses Bawal. The chief crops are gram, wheat and pulses, the chief industries are manufactures of silver and gold ornaments and brass utensils.

Patiala—This is the largest of the Pothoharian States, but its territory is scattered and interspersed by small cities and even single villages belonging to other villages and British districts. Its history as a separate State begins in 1762. During the Sikh War and the Mutiny the Maharaja was loyal and was substantially rewarded. The present Chief H. II Maharaja Ishard, a C.I.E., was born in 1861 and succeeded in 1900. During his minority his administration was exercised by a council of regency consisting of three members. The principal crops are gram, barley and wheat. Cotton and tobacco are also grown in parts of the State. It possesses valuable forests. The State is rich in antiquities especially at Pinjaur, Bunan and Sirhind. The North-Western Railway traverses the State. It contains an Imperial Service contingent, of a regiment of cavalry and two battalions of Infantry.

In 1900 it was decided by the Government of India to appoint a Political Agent for Patiala and the other two Pothoharian States of Jind and Nabha were included in the Agency, to which was afterwards added the Mohammedan State of Bahawalpur. The headquarters of the Agency are at Patiala.

Sirmur (Nahan)—This is a hilly State in the Himalayas under the Political control of the Commissioner of Ambala Division. Its history is said to date from the 11th century. In the eighteenth century the State was able to repulse the Gurkha invasion but in 1793 the Gurkhas were invited to aid in the suppression of an internal revolt in the State and they in turn had to be evicted by the British. In 1857 the Raja rendered valuable services to the British, and during the second Afghan War he sent a contingent to the North-West Frontier. The present chief is H. H. Raja Amar Parkash Bahadur, I.O.S.I., who was born in 1888 and succeeded in 1911. The main agricultural feature of the State is the recent development of the Kharida Dun, a fertile level plain which produces wheat, gram, rice, maize and other crops. The State forests are valuable and there is an iron foundry at Nahan which was started in 1867 but, being unable to compete with the imported iron, is now used for the manufacture of sugar-cane crushing mills. The State supports an Imperial Service Corps of Sappers and Miners which served in the Tirah Expedition of 1897 and is at present on active service in the European War.

The staple crop of the country is rice. Forests of great variety cover the whole of the hill ranges. **Khasi and Jaintia Hills**—These petty chieftships, 25 in number, with a total area of about 3,600 square miles and a population of 126,000, are included under the Government of Assam. Most of the States have treaties or engagements with the British Government. The largest of them is Jaintia, the smallest is Nongkewar, which has a population of 109. Most of them are ruled by a chief or Siam. The Siamship usually remains in one family, but the succession was originally controlled UNDER THE GOVERNMENT OF CENTRAL PROVINCES.

A tribute was imposed on it by the Nagpur Government in the eighteenth century. At this period the constant feuds between Bastar and the neighbouring State of Jeypore in Madras kept the country for many years in a state of anarchy. The chief object of contention was the Kotapad tract, which had originally belonged to Bastar, but had been ceded in return for assistance given by Jeypore to one of the Bastar chiefs during some family dissensions. The Central Provinces Administration finally made this over to Jeypore in 1863, on condition of payment of tribute of Rs 3,000, two-thirds of which sum was remitted from the amount payable by Bastar. By virtue of this arrangement the tribute of Bastar was, until recently, reduced to a nominal amount. Rice is the most important crop. The State is ruled by the feudal Chief. The Dewan of the State is an extra Assistant Conservator of Forests who has three assistants under him. After a recent period of disturbance the State has returned to complete tranquillity and precautions are being taken to remove all causes of unrest by better supervision over the minor State officials and a very considerable forest policy. The chief town is Jagdalpur on the Indravati River.

SURGUNJA—Until 1905 this was included in Chota Nagpur State of Bengal. The most important feature is the Manikpur, a magnificent tableland forming the southern barrier of the State. The early history of Surguja is obscure, but according to a local tradition in Palamanu, the present ruling family is said to be descended from a Khasi Raja of Pala. In 1758 a Maratha army overran the State, and compelled its chief to acknowledge himself a tributary of the Bhonsla Raja. At the end of the eighteenth century, in consequence of the chief having aided a rebellion in Palamanu against the British, an expedition entered Surguja, and, though order was temporarily restored, disputes again broke out between the chief and his relations, necessitating British interference. Until 1818 the State continued to be the scene of constant lawlessness, but in that year it was ceded to the British Government under the provisions of the agreement concluded with Mudda Bhojpal of Berar, and order was soon established. The principal crops are rice and other cereals. The population is mainly aboriginal, the wild Kora tribe being a perpetual source of trouble. A band of them committed several murders and robberies in 1910.

The Central Provinces include fifteen feudatory States subordinate to the administration, with an area of 31,174 square miles and a population of 2,117,002. One of the States, Malkaj, lies within Hosangabad District, the remainder are situated in the Chinatsgarh Division, to the different Districts of which they were formerly attached. Their relations with the Government are controlled by a Political Agent. The States vary greatly in size and importance. The smallest, having an area of 138 square miles and Bastar the largest an area of 14,062 square miles. They are administered by hereditary chiefs, who hold on conditions of loyalty and good government set forth in patents and acknowledgments of fealty, but are nominally free from direct interference save in the case of sentences of death, which require the Chief Commissioner's confirmation. But, as a fact, the Government has exercised a very large amount of control, owing mainly to the frequency with which the States have been taken under direct management, because of either the minority or the misconduct of the chief. The States pay a tribute to Government which amounts in the aggregate to about 2½ lakhs. Statistics relating to the chief States are contained in the following table —

State.	Area.	Population 1911	Revenue (approximate) in lakhs
Bastar	13,062	433,310	3
Important	1,903	174,458	1
Kanker	1,27,014	127,014	2
Khairagarh	931	153,471	3
Nandgaon	871	167,362	4
Raigarh	218,860	218,860	2
Surguja	6,055	248,703	2
Eight other States	5,377	411,824	6
Total	31,174	2,117,002	23

Bastar—This State, which lies to the south-east corner of the Provinces, is the most important of the group. It has an area of 13,002 square miles and a population of 433,310. The family of the Raja is very ancient, and is stated to belong to the Rajputs of the Lunar race. Up to the time of the Marathas, Bastar occupied an almost independent position, but

STATE - PAYING TRIBUTE DIRECTLY TO THE GOVERNMENT OF INDIA

It was announced at the Corporation Board of 1911 that there would in future be no Nazirana payments on successions. The details given above are for 1911-12. In 1915 the tribute amounted to £ 607,100

Foreign Possessions in India.

Portugal and France both hold small territorial possessions in the Indian Peninsula. The Portuguese possessions in India consist of the province of Goa, situated within the limits of the Bombay Presidency, on the Arabian Sea coast, the small territory of Damam on the Gujarat coast, at the entrance to the Gulf of Cambay, and the little island of Diu, lying off the southern extremity of the Kathiawar Peninsula.

Goa forms a compact block of territory surrounded by British districts. Savantwadi state lies to the north of it, the Arabian Sea on the west and North Kanara on the south, and the eastern boundary is the range of the Western Ghats, which separates it from the British districts of Belgaum and North Kanara. The extreme length from north to south is 62 miles and the greatest breadth from east to west 40 miles. The territory has a total area of 1,301 square miles and comprises the island of Goa, acquired by the Portuguese in 1510, the division of Velhas Conquistas, or old Conquistas, comprising the neighbouring districts of Bardes and Salsette, acquired in 1543, and the Novas Conquistas, or New Conquistas, comprising the districts of Pernem, Bicholim or Batagram, Satar, Ponda or Antuz, Zambaulm or Panchalm, and Canacona or Advora, acquired in the latter half of the 18th century. The small island of Andruv, situated opposite the port of Karwar, in the British district of North Kanara, forms administratively a portion of the province of Goa. This was acquired in 1505. The whole country is hilly, especially the western portion, the predominating physical feature being the Western Ghats, which besides bounding the country along the north-east and south-east, jut off westward and spread across the country in a succession of spurs and ridges, of which the highest, Sonagur, is 3,827 feet high. The country is intersected by numerous rivers running westward from the Ghats, and the principal eight, which are all navigable, are in size of some importance. Goa possesses a fine harbour, formed by the promontories of Bardes and Salsette. Half-way between these extremities lies the *gabo*, or cape, which forms the extremity of the island of Goa. This divides the whole bay into two anchorages, known as Agada and Marmagao. Both are capable of accommodating the largest shipping from September to May, but Agada is virtually closed during the south-west monsoon, owing to the high winds and sea and the formation of sand bars across the estuary of the Mandavi river, which opens into Agada. Marmagao is accessible at all times and is therefore the harbour of commercial importance. It is the terminus of the railway running to the coast from the inland British system of lines, a branch water and port have been built there and the trade is considerable, being chiefly transit trade from British territory.

The People

The total population in the whole Goa territory was 475,313 at the census of 1900. This gives a density of 313 persons to the square mile and the population showed an increase of 6 per cent since the census ten years previously. In the Velhas Conquistas 91 per cent of the population is Christian. In the Novas Conquistas Christians and Hindus are almost equally numerous. The Moslems in the territory are numbered in a few thousands. The Christians still very largely adhere to caste distinctions, claiming to be Brahmans, Chastadras and low castes, which do not intermarry. The Hindus are largely Marathas and do not differ from those of the adjacent Konkani districts of Bombay. All classes of the people, with the exception of Europeans, use the Konkan dialect of Marathi, with some admixture of Portuguese words. The official language is Portuguese, which is commonly spoken in the capital and the principal towns, as well as by all educated people. Nearly all the Christians profess the Roman Catholic religion and are spiritually subject to an archbishop, who has the titles of Primate of the East and Patriarch of the East Indies and exercises ecclesiastical jurisdiction also over a great portion of British India. (The Christians of Damam and Diu are subject to a Bishop who bears the titles of Bishop of Damam and Archbishop of Cranganore.) There are numerous churches in Goa, mostly built by the Jesuits and Franciscans prior to the extinction of the religious orders in Portuguese territory. The churches are in charge of secular priests. Hindus and Mahomedans now enjoy perfect freedom in religious matters and have their own places of worship. In the early days of Portuguese rule the worship of Hindu gods in public and the observance of Hindu usages were strictly forbidden and rigorously suppressed.

The Country

One-third of the entire territory of Goa is stated to be under cultivation. A regular land survey was only recently made. The fertility of the soil varies considerably according to quality, situation and water-supply. The Velhas Conquistas are as a rule better cultivated than the Novas Conquistas. In both these divisions a holding of fifteen or sixteen acres would be considered a good sized farm, and the majority of holdings are of smaller extent. The staple produce of the country is rice, of which there are two good varieties, but the quantity produced is barely sufficient to meet the needs of the population for two-thirds of the year. Next to rice, the culture of cocoanut palms is deemed most important, from the variety of uses to which the products are applied. Hilly places and inferior soils are set apart for the cultivation of cereals and several kinds of fruits and vegetables are cultivated to an important extent. The condition of the agricultural classes in the Velhas Conquistas has improved during recent years, owing to the general rise in the prices of all classes of agricultural produce and partly to the current of emigration to British territory. The people in the Novas Conquistas have long been reported as reduced to great want through the oppression of the landowners. Statey forests are found in the Novas Con-

quistas They cover an area of 116 square miles and are under conservation and yield some profit to the administration. Iron is found in parts of the territory, but has not been seriously worked. Portuguese also exist a few years ago.

Commerce

In the days of its glory, Goa was the chief entrepot of commerce between East and West and was especially famous for its trade in horses with the Persian Gulf. It lost its commercial importance with the downfall of the Portuguese empire and its trade is now insignificant. Few manufacturing industries of any moment exist, and most manufactured articles in use are imported. Exports chiefly consist of cocanuts, betel nuts, mangoes and other fruits and raw produce. A line of railway connects Mormaço with the Veldras and Southern Uthmanya Railway. Its length from Mormaço to Castle Rock, above the Ghats, where it joins the British system, is 51 miles, of which 49 are in Portuguese territory. The railway is under the management of the Madras and Southern Mahratta Railway administration, and the bulk of the trade of Mormaço port is what it brings down from and takes to the interior. The telegraphs in Goa territory are worked as part of the system of British India, and are maintained jointly by the British and Portuguese Governments. The Goa territory was formerly subject to devastating famines and the people now suffer heart losses in times of drought. There are then supplied, though at great cost, with rice from British territory.

The Capital

Nova Goa, the present capital of Portuguese India, comprehends Panjim and Ribandar, as well as the old city of Goa, and is six miles in extent. Old Goa is some five miles distant from the new city. Panjim occupies a narrow strip of land leading up to the Cabo, the cape dividing the Aquada bay from that of Mormaço, and mainly slopes down to the edge of the Aquada. It was selected as the residence of the Portuguese Viceroy in 1759, and in 1848 it was raised to its present rank as the capital of Portuguese India. The appearance of the city, with its row of public buildings and elegant private residences, as seen from the water, is very picturesque and this impression is not belied by a closer inspection of its neat and spacious roads, bordered by decent, tidy houses. The most imposing public structures are the barracks, an immense quadrangular building of which accommodates the Government, the Public Library and the Government Press. Other noticeable buildings are the Cathedral and various churches, the viceregal palace, the High Court and so on. The square in the lower part of the town is adorned with a life-sized statue of Albuquerque standing under a canopy.

History

Goa was captured for the Portuguese by Alfonso de Albuquerque in 1510. Albuquerque promptly fortified the place and established Portuguese rule on a firm basis. From this time Goa rapidly rose in importance and became the metropolis of Portuguese power in the East. There was constant fighting with

the armies of the Bijapur kingdom, but the surrounding territory now known as the Vellhas Portuguese held their own and gained the sur Conquistas

The subsequent history of the town is one of luxury, ostentation and decay. Goa reached its summit of prosperity at the end of the sixteenth century. The accounts of travellers show that the Goa of those days presented a scene of military, ecclesiastical and commercial magnificence which has had no parallel in the British capitals of India. But the Portuguese based their dominion in India on conquest by the sword and they laboured to consolidate it by a pro-elaborate organization which throws the monstrous efforts of every other European power in India into the shade. Old Goa, as the ruins of the old capital are called to day, had a hundred churches, many of them of magnificent proportions, and the Inquisition was a power in the land. The result showed how rotten was this basis and how feebly cemented the superstructure reared upon it. After the genius of Albuquerque and the energies of the early Viceroys had spent themselves, their armies constituted a vast idle population in the capital. The work of conquest was over and it left behind it a gay and wealthy city of conquerors who had nothing to do.

Modern Times

The Portuguese were unable to hold their own against the native banditti. There was frequent recurring fighting and in 1741 the Marathas invaded the neighbourhood of Goa and threatened the city itself. An army of 12,000 men arrived from Portugal at the critical moment. The invaders were beaten off, and the Nova Conquistas were added to the Portuguese possessions. In 1844 the shelter given by Goa to fugitives from justice in British territory threatened to bring about a rupture with the British Government at Bombay. In 1852 the Ranes of Saran, in the Nova Conquistas revolted. In 1871 the native army in Goa mutilated and the king's own brother came from Lisbon to deal with the trouble and having done so disbanded the native army, which has never been reconstituted. But another outbreak among the troops took place in 1895 and the Ranes joined them the trouble was again not quieted until the arrival of another special expedition from Lisbon. The Ranes again broke out in 1901 and again in 1912, troops being again imported to deal with the last outbreak, which was only reported concluded in the summer of 1913.

Administration

Goa is regarded as an integral portion of the Portuguese Empire and, with Damam and Diu, forms for administrative purposes one province subject to a Governor General, who is appointed directly by the Lisbon Government and holds office for five years. Besides military authority in the province the Governor-General is aided in his administration by a Council composed of a Chief Secretary, the Archbishop of Goa or, in his absence, the chief ecclesiastical officer exercising his functions, the

High Court, the two highest military officers in Goa, the Attorney-General, the Inspector selho da agricultura. The first of these is composed of the Chief Secretary, the Architect, the Health Officer and the Professor of Public Works, the Health Officer, a Professor of the Medico-Surgical College, a Professor of the Normal School and a representative from each of the Municipal Corporations of the province. In addition to this machinery of administration there are subordinate agencies for the local government of every district.

DAMAN.

The settlement of Damam lies at the entrance to the Gulf of Cambay, about 100 miles north of Bombay. It is composed of two portions, namely, Damam proper, lying on the coast, and the detached pargana of Nagar Havli, separated from it by a narrow strip of British territory and bisected by the B. D. & C. I. Railway. Damam proper contains an area of 22 square miles and 26 villages and has a population (1900) of 17,391. Nagar Havli has an area of 60 square miles and a population (1900) of 24,280. The town of Damam was sacked by the Portuguese in 1531, rebuilt by the natives and retaken by the Portuguese.

ment establishments in India. They converted the mosque into a church and have since built eight other places of worship. Of the total population the number of Christians is 1,568. The number of houses is 8,271, according to the same census. The native Europeans adopt the European costume, some of the women dress themselves after the present European fashion, and others following the old style of petticoat and mantle once prevalent in Spain and Portugal. The soil of the settlement is moist and fertile, especially in the pargana of Nagar Havli, forests, especially in the pargana of Nagar Havli, forests, excise and customs duties.

DIU.

Diu is an island lying off the southern extremity of the Kathiawar Peninsula, from which it is separated by a narrow channel through a considerable swamp. It has a small but excellent harbour, where vessels can safely ride at anchor in two fathoms of water and owing to the great advantages which its position offers for trade with Arabia and the Persian Gulf, the Portuguese were fixed at an early period with a desire to obtain possession of it. This they gained, first by treaty with the Sultan of Gujarat and then by force of arms. Diu became opulent and famous for its commerce. It has now dwindled into insignificance. The extreme length of the island is about seven miles and its breadth, from north to south, two miles. The area is 20 square miles. The population of the town of Diu, from which the island takes its name, is said to have been 50,000 in the days of its commercial prosperity. The total population of the island, according to the census of 1900, is 14,614, of whom 375 were Christians.

FRENCH POSSESSIONS.

The French possessions in India comprised five Settlements, with certain dependent lodges, or plots. They aggregated 208 square miles, and had a total population in 1812 of 282,386. The first French expedition into Indian waters, with a view to open up commercial relations, was attempted in 1603. It was undertaken by private merchants at Rouen, but it failed, as also did several similar attempts which followed. In 1642 Cardinal Richelieu founded the first Compagnie d'Orient, but its efforts met with no success. Colbert reconstituted the Company on a larger basis in 1664, granting exemption from taxes and a monopoly of the Indian trade for fifty years after having twice attempted, without success, to establish itself in Madagascar, Colbert's Company again took up the idea of direct trade with India, and its President, Caron, founded in 1668 the Compagnie, or agency, at Surat. But on finding that city unsuited for a head establishment he seized the Coromandel coast, in 1672 seized St. Thomas, a Portuguese town adjoining Madras

but was restored in 1699. It was besieged four times by the English. The first siege, under Admiral Boscawen in 1748 was unsuccessful. The second, under Eyre Coote in 1761, restored it in 1765. It was again besieged and captured in 1778 by Sir Hector Munro, and the fortifications were demolished in 1770. The place was again restored in 1785 under the Treaty of Versailles of 1783. It was captured a fourth time by Colonel Balthazar in 1793, and finally restored in 1816.

The Settlement comprises a number of isolated pieces of territory which are cut off from the main part and surrounded by the British District of South Arcot, except where they border on the sea. This fact occasions considerable difficulty in questions connected with crime, land customs and excise. The Collector of South Arcot is empowered to deal with ordinary correspondence with the French authorities on these and kindred matters, and in this capacity is styled the Special Agent at Pondicherry. Itself is a British Consular

CHANDERNAGAR.

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Chandernagar is situated on the bank of the Hooghly, a short distance below Chinsura. Population (1914) 28,016. The town was permanently occupied by the French in 1688, though previously it had been temporarily occupied by them at a date given as 1672 or 1676. It did not, however, rise to any importance till the time of Duplex. It changed hands between British and French various times during the Napoleonic wars and was finally restored to the French in 1816.

The former grandeur of Chandernagar has disappeared, and at present it is little more than a quiet suburban town with little external trade. The railway station on the East Indian

KARikal.

Karikal lies on the Coromandel Coast between the Tanjore District of Madras and the Bay of Bengal. The Settlement is divided into three communes, containing 110 villages in all, and covering an area of 68 square miles. It is governed by an Administrator subordinate to the Governor at Pondicherry. The population has in recent years rapidly decreased. In 1883 it was 93,055, in 1891, 70,526, in 1901, 56,595, in 1912, 56,579, and in 1914, 49,764, but the density is still very high, being 1,068 persons per square mile. Karimbakomam is the only taluk in Tanjore District which has a higher density. Each of the three communes—namely, Karikal, La Grande Adee, and Nedungadu—possesses a mayor and council. The members are all elected by universal suffrage but in the municipality of Karikal half the number of seats are reserved for Europeans or their descendants. The country is very fertile, being irrigated by seven branches of the Cauvery, besides many smaller channels.

The capital of the Settlement is situated on the north bank of the river Arasalar, about 14 miles from its mouth. It has a brisk trade in rice with Ceylon, and to a less extent with France, and very little with other French colonies. The port is merely an open roadstead, provided with a light-house 142 feet high, the light in which has a range of from 8 to 10 miles. Indian labourers emigrate from Karikal to the French colonies in large numbers. In 1899 Karikal was connected with Perakam on the Tanjore District Board Railway. Karikal finally came into French possession on the settlement after 1815.

Operations in Mesopotamia.

into the interior in the interval of the operations, and to reconnoitre the British positions, and to reconnoitre the British positions, and to reconnoitre the British positions.

THE EXPEDITION TO BASRA.

At this point it was convenient to send a detachment of the expedition to reconnoitre the positions of the British forces, and to reconnoitre the British positions, and to reconnoitre the British positions.

It was found that the British forces were in a position to attack the Turkish forces, and to reconnoitre the British positions, and to reconnoitre the British positions.

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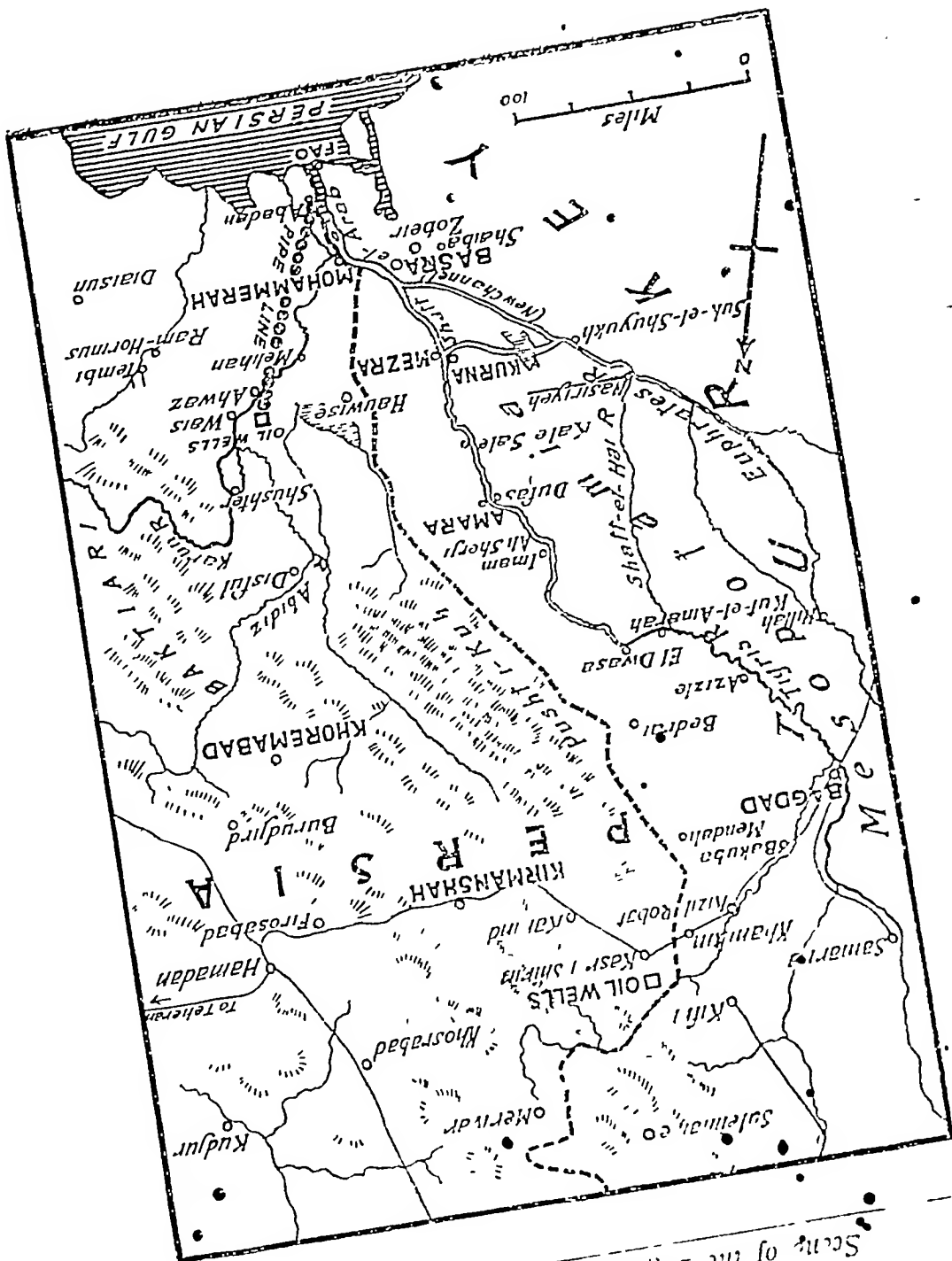
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number of low hills to the north, from which they continually bombarded the town. It was necessary to evict the enemy from their positions before we could advance north of Kumra. The whole country for many miles to the north was under a great deal of water, except a few low hills and banks and hillocks such as those occupied by the enemy. The country was very fertile and the hills were covered with rice. The hills were killed within 11 hours by British officers, except into the water, but two of the officers, five other Germans, believed to be taken included three German non-commissioned officers, and 20 other casualties. The prisoners killed and four days were on British officers during the four days were on British officers. Our own loss was 11 men wounded the four days were on British officers.

[illegible]

The Turkish and constructed a dam on the Hakkika channel a short distance outside the town of Lake. Although the existence of this dam was known it proved a much more difficult obstacle than had been anticipated. The Turks chose the site carefully and expended a vast amount of labour on its construction, for it took the British a week of hard work to pass their by no means numerous ships through it. All this had given time to the enemy to bring up reinforcements and the British were now faced by a force greatly superior in numbers to their own. The enemy occupied an entrenched position on both banks of the channel at the point where it leaves the Euphrates. On the left, the British attacked the Turkish position on both sides of the channel. Infantry moved along either bank assisted by the fire of gun-boat which moved up the channel behind them sweeping for mines. A fleet of 30th Mountain Battery on rats moved up the lake with the infantry, protecting their flank from a hostile attack, protecting their lake with the mine, and a large amount of ammunition. Light corps were found on Norfolk Hill and a few of the prisoners had



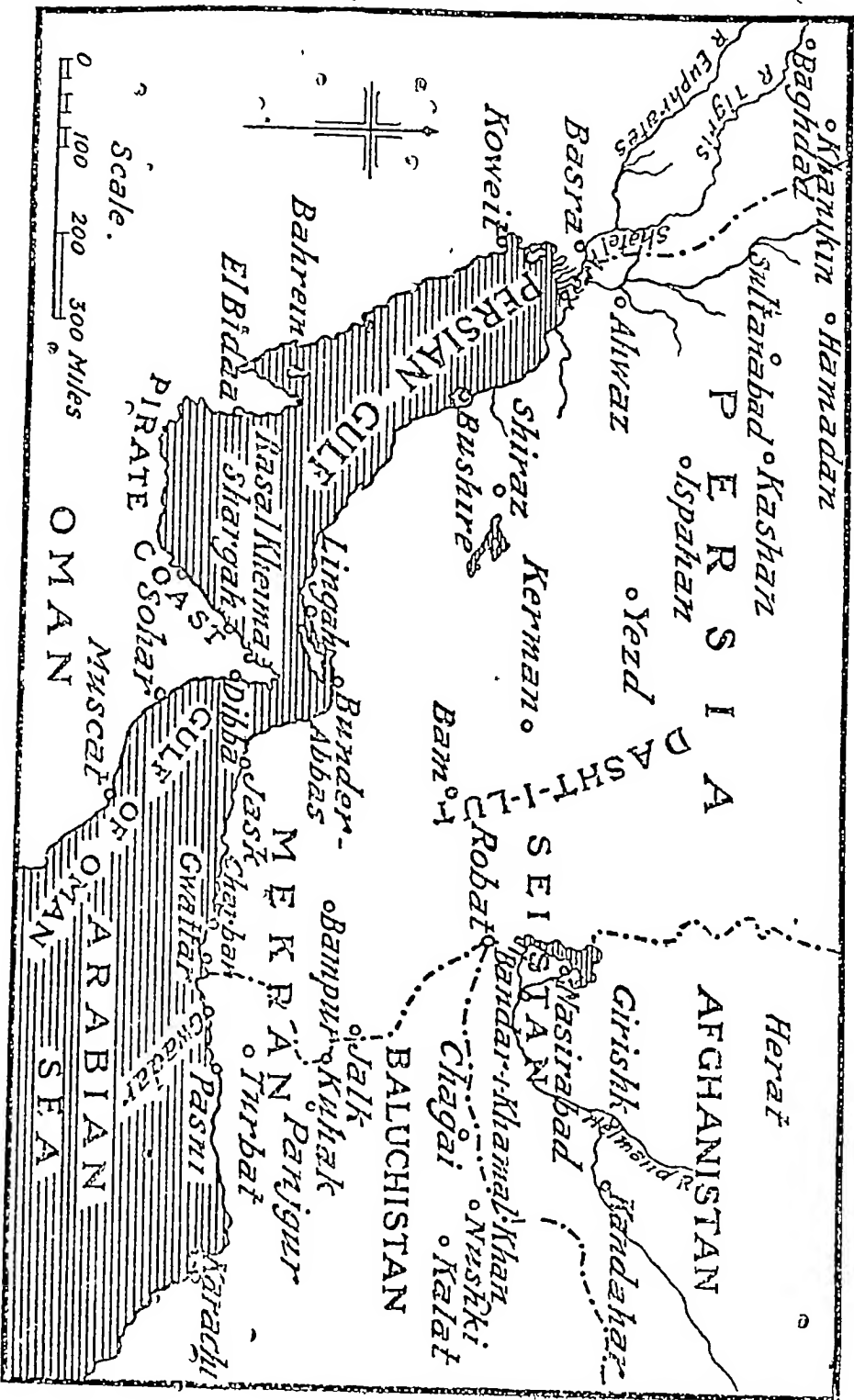
Scenery of the Tigris in Mesopotamia

enemies' trenches were well constructed and were held by a mixed force of Turks and Arabs, but the attack did not follow, and so resolutely did the British push on that they not only occupied the trenches, but crossing the Tigris rates in helmets, they attacked the Turkish Artillery position and captured a complete battery.

The Turks retired up the river and on the next day the British pushed on, reaching Asani on the evening of the 6th. On the 8th it became evident that heavy reinforcements had reached the enemy. General Gorringe realised that he must wait until he was in a stronger position to attack, and set work to strengthening his own defences. The last of the reinforcements reached General Gorringe on the 22nd and he made up his mind to attack the enemy on the 24th. It was 6-30 in the evening before they were able to capture the last position at the point of the bayonet, the Turks retiring either to surrender or leave the trenches. That night the naval boats pushed on to Asani, encountering a good deal of opposition as the enemy entered the town. The firing gradually died down, however, and by the time the troops were able to march in, all resistance was at an end. All the artillery which the Turks had at Asani, 17 guns including one large howitzer fell into the hands of the British as well as about a thousand prisoners and large stores of rifles and ammunition.

Kut-el-Amara—Any detailed account of the minor operations which led up to the battle on the 27th and 28th September would fill many columns, for the British force had left the lower reaches of the river and was operating 300 miles away from its base, with lines of communication stretching down the winding uncertain course of the Tigris. The Turks had taken up a position on both banks astride the river with the intention of preventing the British forces from reaching Kut-el-Amara. The line of defence lay almost north and south, for here the river flows approximately from West to East a few miles above the Turkish position the river bears again more to the North. A boat bridge crosses the Tigris three miles below Kut-el-Amara. The defences constructed by the Turks stretched for about six miles on either side of the river. An old dry canal bed branches off at angles to the right bank of the river, and its artificial banks twenty feet high were the only outstanding features in the whole of the country. A bridge of boats had been constructed at the place of concentration and this bridge was an important factor in General Townshend's plans for attack. Broadly, this plan was to make a demonstration against the enemy's right, that is on the right bank of the river, to give him the impression that this bank was to be the object of the main attack, and then, by means of the bridge to cross to the left bank of the river with the majority of his force and attack the Turkish left. Dawn on the 27th found the whole of the force in position. An immediate start was made, and in a short time the whole of the line was engaged by the enemy's long range artillery. British troops on the right bank developed

advanced Turkish troops in the hope that their right would be reinforced and their left weakened. As soon as light appeared, General Delamain developed his force for attack. The greater part was directed to a flank attack, while the remainder held in front against the left portion of the section of defence between the two marshes. General Fry at the same time developed all his strength in the hope of being able to close with the Turks in front of him. Soon round that, owing to the extent of the Turkish line, the route which they would have to take, was much more circuitous than had been expected. At the same time the frontal attack had become so seriously engaged that General Delamain decided to push home an attack with the troops, at his disposal on the extreme left of the Turkish defences in front of him. The infantry rushed forward and captured the first line of trenches at the point of the bayonet. Here their work was by no means finished, for a devastating fire swept them from the rest of this section of the defence which was still in the hands of the enemy. A wheel to the left in the maze of trenches brought them face to face with very strong bodies of Turks and after a gallant attempt to force their way forward they were compelled to withdraw the leading troops or the flankings force which were now coming round the marsh junction with these was effected at about half past ten in the morning. Communications on the right they swept the whole of the Turkish defences between the two marshes from left to right only completing their task at two o'clock in the afternoon. They were falling for want of water, but by marching round the back of the enemy's position between the river and the marsh, General Delamain hoped to reach the river at one of its bends before he was called upon to engage the enemy again. In this hope the column advanced and at about five o'clock in the afternoon had reached a point behind the Turkish position about a mile and a half from the river. Here they suddenly came under a very violent artillery fire from the further bank of the river and General Delamain, realising that they could not reach the river by this route, determined to attack the Turkish position from the rear, and changing the direction of his column marched straight towards the trenches. This was about half past five and the light was beginning to fail. Gradually the British column realised that they were marching parallel to a large force of the enemy's infantry and guns at a distance of about a mile. There was no time for preparation or orders for attack, nor indeed was there any need for them. An order to "right turn" brought the British infantry and guns face to face with the Turkish force. Without firing a shot the troops turned and advanced on the enemy. The Turks had realised the situation at the same moment, but fortune favoured them, for the rocks along which they were passing lay along the edge of a disused unken watercourse, and they quickly slipped into this through suffering heavy losses the British pushed straight on, only pausing to return the



on August 1, 1914, the Act had been extended so as to comprise the Court established by the Persian Coast and Islands Order-in-Council, 1907. Thus the Councils-General for Persia and the coasts and islands of the Persian Gulf will be able to enforce the suppression of the slave trade in the neighbourhood which was agreed to be desirable in a treaty made with the Persian Government so long ago as 1882.

The Sultans have been in a difficult position for a good many years. They hold their capital of Maskat the adjacent town of Muskat, one or two other coast towns and certain points in the interior, but as they possess few troops they find themselves unable to control the roving Beduin who wander all over most of the State. When the Beduin win money they were wont to ride down to Muskat, the centre of the date trade, and threaten to sack the town. The late Sultan, who died in 1913, was generally compelled to bribe them to go away. The rising which began in 1913 was a result of the fact that the Sultan was generally rising which began in 1913 was a result of the fact that the Sultan was generally

the dates for which Maskat is famous. Great Britain has special interests at Maskat, based upon various documents, the chief of which is one dated in 1891-2. The late Sultan asked us to protect him against the Persians. We said we would protect his capital and coast, but could not send an expedition into the interior against the elusive Beduin. We sent Indian troops to Maskat, and they have been there ever since. It is quite probable that the tribesmen were excited by the news of the Great War, and determined to push their own operations more vigorously. The rising culminated in an attack on the outposts of Muskat on the 10th and 11th instant. Detachments of the 35th Infantry and the 102nd Grenadiers had previously been sent to support the Sultan's forces and the attack was driven back. The rebels were casualties amounting to 500 men. There were no further attacks, and the rebels were reported to be greatly disheartened.

The Pirate Coast.

Turning Cape Musandam and entering the Gulf Proper, we pass the Pirate Coast, controlled by the six Trucial Chiefs. The name of this territory has now ceased to have any meaning, but in the early days it had a very real relation to the actual conditions. The pirates were the boldest of their kind, and they did not hesitate to attack on occasion, and not always without success, the Company's ships of war. Large expeditions were fitted out to break their power, with such success that since 1820 no considerable punitive measures have been necessary. The Trucial Chiefs are bound to Great Britain by a series of engagements, beginning with 1800 and ending with the perpetual treaty of 1853 by which they bound themselves to avoid all hostilities at sea, and the subsequent treaty of 1873 by which they undertook to prohibit altogether the traffic in slaves. The relations of the Trucial Chiefs are controlled by the British Resident at Bushire, who visits the Pirate Coast

Bahrein.

North of the Pirate Coast lies the little archipelago which forms the chiefship of the Sheikh of Bahrein. Of this group of islands only those of Bahrein and Muharik are of any size, but their importance is out of all proportion to their extent. This is the great centre of the Gulf pearl fishery, which, in a good year, may be worth half a million pounds sterling. The anchorage is wretched, and at certain states of the tide ships have to lie four miles from the shore, which is not even approachable by boats, and passengers, mills and cargo have to be landed in on the donkeys for which Bahrein is famous. But this notwithstanding, the trade of the port is valued at over a million and a quarter sterling, and the customs revenue, which amounts to some eighty thousand pounds, makes the Sheikh the richest ruler in the Gulf. Bahrein has passed through more than usually chequered experiences. Not the least formidable of these are the efforts of the Turks to threaten its independence. These took definite form in the third quarter of the last century, when Midhat Pasha, Veli of Basra, occupied the promontory of El Kater, as well as El Kattif, over against Bahrein, and converted El Hasa into a district. The war with Russia ended and the Turks at El Kater are still a menace to Bahrein, but negotiations for their withdrawal are pending. The Sheikh by the treaty of 1861, entered into special engagements with the British Government, by whom his rights are guaranteed. In the neighbourhood of Bahrein is the vast buying ground which has hitherto baffled archaeologists. The generally accepted theory is that they are relics of the Phoenicians, who are known to have traded in these waters.

Koweit.

In the north-west corner of the Gulf lies the port of Koweit, which has made more stir than any place of similar size in the world. The importance of Koweit lies solely in the fact that it is the one possible Gulf terminus of the Baghdad

GUNRUNNING IN THE PERSIAN GULF.

The question of gunrunning in the Persian Gulf is inseparable from the position on the North-Western Frontier, because the copious supplies of modern rifles, with suitable ammunition, from this source have transformed the stealing, even if it meant the murder of a sentry, the Persian and Arabian shores. The Frontier were discharged and freely distributed round Belgium, and England, to Alaska, where they were bought from Europe, France, Turkey and Persia rather than Great Britain this trade, though considerable, concerned rough counter-made rifles, which is turned out in small numbers by the Rohat Pass Afghans. But after the rising of 1807 these rifles began to

From this brief summary of the conditions in the Persian Gulf it will be seen that the British position is a precarious one. We have stamped out piracy, we have kept the peace, we have enough to exclude privileges, the commerce of these waters is freely open to the ships of all nations. But this policy is in the main negative rather than positive, it is so barren of definite territorial achievements that it is singularly open to attack, it depends for

Summary.

Consul at Kismayu, 11-01-18 Durat
Consul at Bender Abbas and Assistant to the
Resident, 18-01-18

Residency Surgeon at Pushtur, Major J
McPherson

In print: Published: Printed at, No. 1, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 84

Political Resident in the Persian Gulf,
Sir Percy Cox, B.C.S. K.C.I.F., O.S.I.

some quarters on the ground that it involved the British Government in indefinite commitments in Southern Persia, and that it might be necessary to employ troops to defend Government property on foreign soil, that of Persia itself, in the belief that it secured the British Navy an abundant supply of cheap oil and since the conclusion of the Agreement the storage capacity at Abadan has been very largely increased. The paper was met by the Times in 1911, but subsequently it is reported

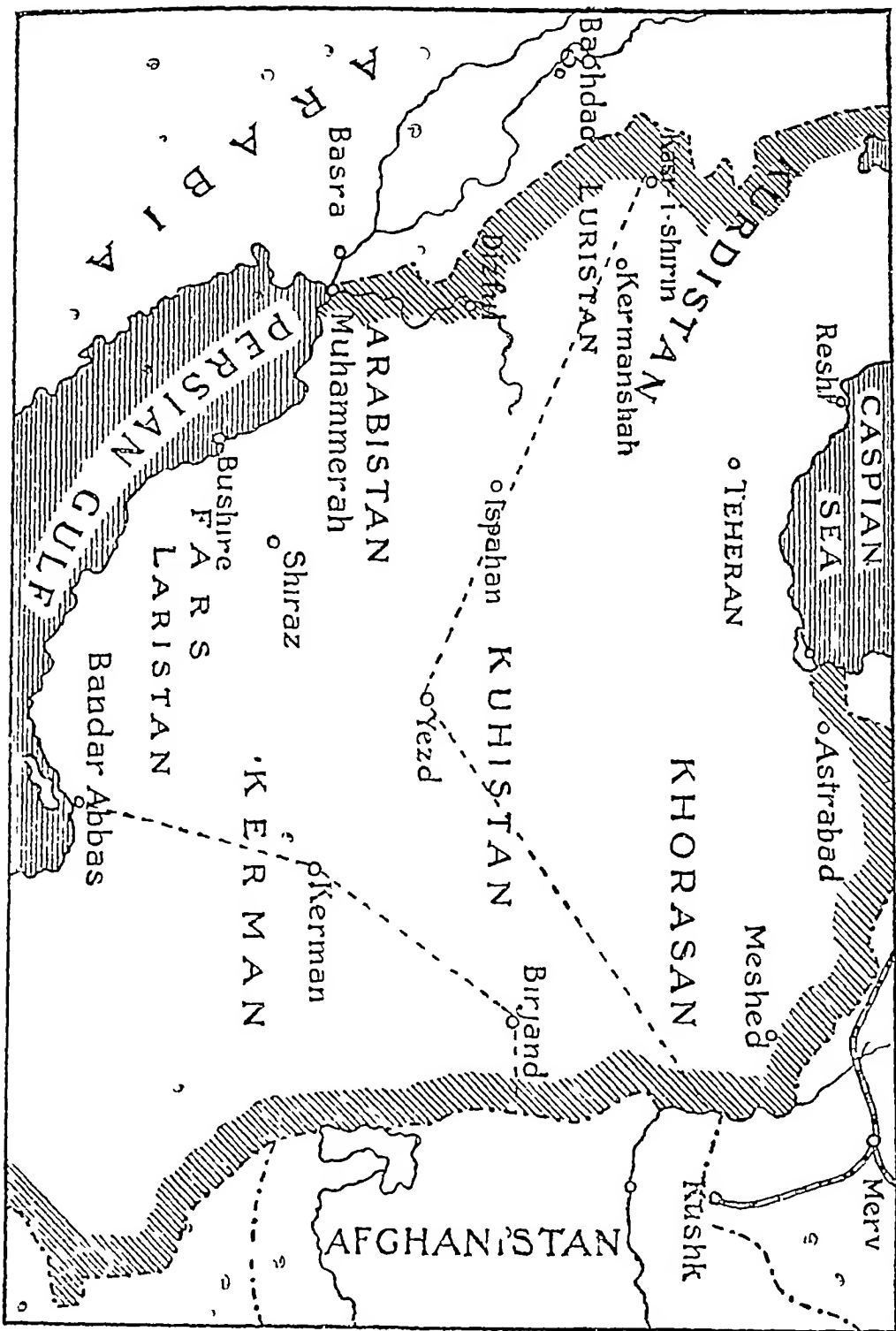
The following table shows the results of the survey conducted in 1998. The data is presented in two columns: the first column lists the categories of the survey, and the second column shows the corresponding percentages. The percentages are rounded to the nearest whole number.

Category	Percentage
Very satisfied	15%
Satisfied	35%
Not satisfied	45%
Very dissatisfied	5%

The survey results indicate that a significant portion of the respondents are not satisfied with the current situation. This finding is consistent with the previous research conducted in this area. The data suggests that there is a need for further investigation into the factors contributing to the dissatisfaction.

At the present time, of course the politics of the Persian Gulf and of Turkish-Arabistan are in a state of uncertainty owing to the war before the war broke out, active negotiations were conducted between the British, the Turkish and the German Governments with a view to the resumption of the whole situation (in more than one occasion it was announced that they were on the verge of completion). The outline of these negotiations was that the Baghdad railway should proceed as far as Basra as a purely German-Turkish enterprise, but that it should not proceed beyond Basra without the approval of the British Government. Great Britain was to receive two directors on the Board to guard against discrimination of rates. The Sheikh of Kuwait was to recognise the suzerainty of Turkey, but he was not to be interfered with, and Turkey was to accept the treaty of 1897. The Turkish post at El Kater, opposite to Bahrein was to be withdrawn, but incessant acts of vested hostility indicated that the attitude of Turkey in the great war could not be relied upon, despite the repeated assurances of neutrality by the Grand Vizier. In October a British-Indian force was sent to the Gulf, landing at Bahrein, to be ready for all emergencies it caused little surprise then when the official announcement was received that the Turkish warship on Russian ships and bombarding Russian coast towns. The process of this force is recorded in the opening pages of this section.

its permanent success on the maintenance of the status quo in a part of the world where conditions are fast changing nor was it in any way warranted by the Anglo-Russian agreement. On the contrary, by that instrument the British zone stopped short at Bunder Abbas, the British sphere being restricted to the east of a line drawn from the Afghan frontier to Gazik, Kirgand, Kezeman and Bunder Abbas. It is a curious thing that this line and the delimitation of the Russian zone by a line from Kasat-shin, Ispahan, Izid, and Kakh, to the junction of the Persian, Afghan, and Russian frontiers—that is to say the whole of the Persian littoral—is in the neutral zone. The Government made no mention of the Persian littoral in the Convention a letter was published from Sir Edward Grey to the British Ambassador at Petrograd announcing that the Persian Gulf lay outside its scope, but that the Russian Government had acted during the negotiations that it did not deny the special interests of Great Britain in the Gulf and it was intimated that Great Britain reserved them.



Anglo-Russian Agreement

Whether with this purpose or not, Russian intrigue was particularly active in Selsian in the early years of the century. Having Russian and through the agency of the Belgian Customs officials, "scientific missions," and an international plague cordon, sought to establish influence, and to stifle the British trade which was gradually being built up by way of Nushli. These efforts died down before the presence of the Alcholan mission, which, in pursuance of Treaty rights, was demarcating the boundary between Persia and Afghanistan, with special reference to the distribution of the waters of the Helmand. They finally ceased with the conclusion of the Anglo-Russian Agreement. Since then the international importance of Selsian has waned. Whether on account of the Agreement, which bars the line of advance through Selsian, or because of the discovery of an easier route, we cannot determine, but Russian activities in railway construction have been diverted to the Trans-Persian route, which would take a direct line through Lebanon from Baku, and meet the Arabian Sea at Bunder Abbas or Chabbar.

The natural conditions which give to Selsian this strategic importance persist. Meantime the Selsian trade route. The distance from Qazvin to the Selsian border at Killa Rohat is 465 miles, most of it dead level, and it has now been provided with fortified posts, dak bungalows, wells, and all facilities for caravan traffic. The railway has been pushed out from Speard, on the Bolan Railway to Nushli, so as to provide a better starting point for the caravans than Qazvin. The value of the trade carried over this route last year was Rs 19 lakhs.

Text of the Agreement

This Agreement, which aimed at an amicable settlement of all questions likely to disturb the friendly relations of the two countries in Asia generally, and in Persia, Afghanistan and Tibet in particular, was signed on August 31st, 1907, and officially communicated to the Powers in St Petersburg on September 24. After reciting the desire of both Governments to maintain the integrity of Persia, and to allow all nations equal facilities for trade in that country, the Convention states that in certain parts, owing to their geographical proximity to their own territories, Great Britain and Russia have special interests. Accordingly (Art I) To the north of a line drawn from Kasr-i-Shirin, Isfahan, Tez and Khashk to the junction of the Persian, Russian and Afghanistan frontiers, Great Britain agrees not to seek for itself or its own subjects or those of any other country any political or commercial concessions, such as railways, banking, telegraph, roads, transport or insurance, or to oppose the acquisition of such concessions by the Russian Government or its subjects. II Russia gives a similar undertaking concerning the region to the south of a line extending from the Afghan frontier to Gazik, Brijand, Kerman and Bander Abbas. III Russia and Great Britain agree not to oppose, without previous agreement, the granting of concessions to subjects of either country in the regions situated between the lines above-

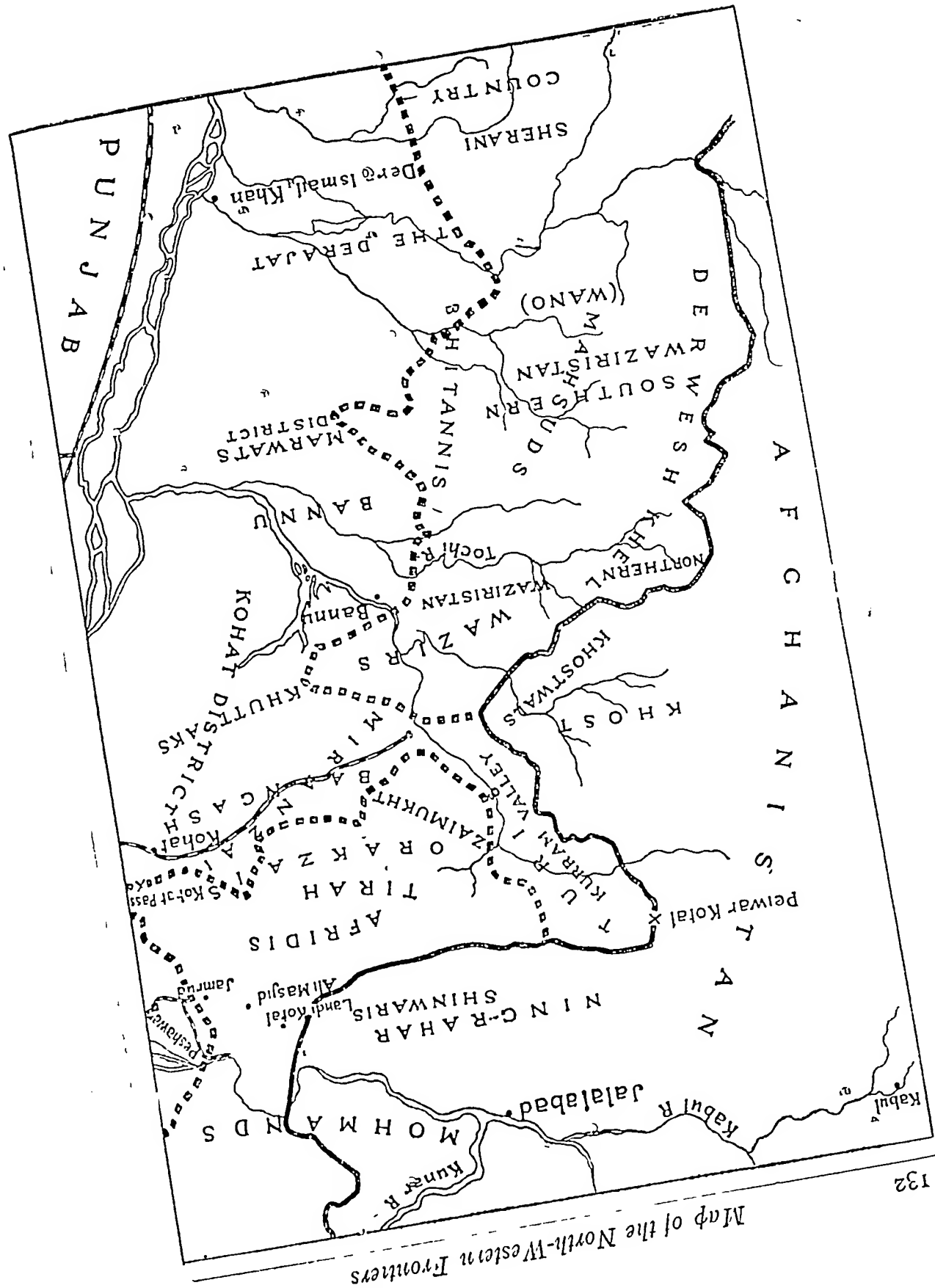
mentioned. All existing concessions in the regions above designated are maintained. IV "The arrangements by which certain Persian revenues were pledged for the payment of the loans contracted by the Shah's Government with the Persian Bank of Commerce and the signing of the Convention are maintained. V In the event of any irregularities in the redemption or service of these loans Russia may institute a control over the revenues situated within the zone defined by Article I and Great Britain may do the same in the zone defined by Article II. But before instituting such a control the two Governments agree to a friendly exchange of ideas with a view to determining its nature, and avoiding any action in contravention of the principles of the Convention. With the Convention a letter was published from Sir E. Grey to the British Ambassador at St Petersburg announcing that the Persian Gulf lay outside its scope, but that the Russian Government had stated during the negotiations that it did not deny the special interests of Great Britain in the Gulf, and it was intimated that Great Britain reasserted them.

Chaos in Persia

So far from improving the domestic situation in Persia, the Convention provided a condition of thinly disguised anarchy. There was little security for life or property outside the zone commanded by the Russian troops in the North, and in 1913, the Central India Horse, a solitary Indian Regiment sent to Shiraz, was with drawn. A dismal picture of Persian disorder was drawn in the Persian Blue Book published in July, 1913. Lord Curzon, summarising it in a debate in the House of Lords on July 28 said—"The picture delineated in this Blue-book of Southern Persia is a picture of a country in the throes of dissolution, given up to rapine and brigandage, where trade is at a standstill, where armed bands rove about the country doing as they please, where British officers are fired at and robbed, and in one particular unfortunate case an officer was killed, a country where the central Government is impotent and local government ignored."

"In Northern Persia—and I must discriminate between Northern and Southern Persia—the conditions are very different. I do not say there is no insecurity, but life and property are relatively safe in Northern Persia, and this is owing to the presence of an overwhelming force of Russian troops in that part of the country."

Lord Alorley thus indicated the Government's policy. I will put that common policy in seven propositions—(1) maintaining the spirit and the letter of the Anglo-Russian Convention, (2) maintaining the independence of Persia and avoidance of partition and an approach to partition, economical, administrative, political, (3) while faithful to the stability of our present alliance and to our real engagements we are faithful and to a equal degree to the good of Persia, (4) to uphold some form of constitutional Government, (5) to lose no chance of easing the distressed situation in which the Persian Government now is, by counsel, attention, and such assistance as from time to time we may



and Colonel Roos-Keppel taking the Khyber ridges down the Bazar Valley inflicted such a crushing punishment on them that they were glad to accept terms of peace negotiated by the main Afridi tribe. A month later, action was necessary against the Mohmands. In this case the rebellious tribesmen were actively supported by Afghan levies, assembled and sent out in Afghan territory at Lalpura. Two brigades entered the country and defeated them. There was a division when lashkars numbering nearly twenty thousand moved up from Afghanistan and threatened the British post of Landi Kot in the Khyber. They too were driven back into Afghan territory, and the trouble was at an end. The Amir, who had been strangely quiescent, asserted his authority and the irregular warfare waged from Afghan territory ceased.

Policy Justified

These expeditions have been seized upon by critics to condemn the present policy. They justify it. Thanks to the confident engagement of ten years of non aggression, the disturbed area was localised, the Khyber was kept open, the Afridis lent their aid in concluding peace. For these reasons, when the Government of India proposed the occupation of further strategic points in order to control the Zaskas Khels, the Secretary of State wisely imposed his embargo. The strength of the position was still further demonstrated when in 1910 the tribesmen suffered heavy losses in consequence of measures to suppress the arms traffic of a gun-running. The frontier is always in a state of suppressed ferment. No one knows what will happen to-morrow. But the tribesmen, feeling confident in the knowledge that no attack on their independence is contemplated and growing richer in consequence of the development of trade and agriculture, are more easily handled. With the removal of the Russian menace, or rather its transference to Persia, the importance of the North-West Frontier has tended to subside. There are still heard mutterings of the necessity for a reversal to the forward policy, and for the occupation of the Independent Territory right up to the Durand line. But they are not regarded seriously. The tribesmen are so saturated with rifles and ammunition, as the result of importations from the Persian Gulf, that the task would be long and costly. When it was achieved the frontier problem would only have shifted. Instead of a frontier against the Independent tribesmen, India would have a frontier against Afghans, and the problem would still be present, only in an aggravated form.

The history of the Independent Territory during the year was one of unrest, though this was local and sporadic, and did not take the form of a concerted disturbance, such as that which embarrassed the Government of India in 1897. The Viceroy, in summarising the position in the speech which closed the session in 1897, said: "The Government of India are of secondary importance. For nearly the relations of Afghanistan with the Indian Empire are dominated by one man—consideration—the relation of Afghanistan to a Russian invasion of India. All other considerations are of secondary importance." The relations of Afghanistan with the Indian Empire are dominated by one man—consideration—the relation of Afghanistan to a Russian invasion of India. All other considerations are of secondary importance. For nearly the relations of Afghanistan with the Indian Empire are dominated by one man—consideration—the relation of Afghanistan to a Russian invasion of India. All other considerations are of secondary importance.

AFGHANISTAN.

As for the nomenclature of the Frontier tribes the term Pathan is not racial. It is used to denote status, and is generally used of the Frontier tribes and their connections. Further to the South on the borders between the North-West Frontier Province and Baluchistan, are found the Shitamis, who are an Afghan people. Waziristan is inhabited by the Waziris, who have two main branches, the Northern Waziristan. The latter have two main sections, the Utmanzai and the Ahmadzai, and these again are subdivided into numerous clans. In the Kurram the Turis (who unlike their neighbours are Shikhs) form the strongest element. In the Khyber region the main tribes are the Orakzai and the Afridis, both found in the mountainous country south of the Khyber Pass commonly called Tirah. Both are extensively subdivided the strongest sections of the Orakzai being the Tashkharzai and the Masozai and of the Afridis the Maik Bini Khel, the Zaskas Khel and the Kambar Khel and the Kuki Khel. Between the Khyber Pass and the Kabul River are the Alisozais and further south the Mohmands and the Utman Khel. Beyond these are the Yusufzai, who form the bulk of the inhabitants of Swat and Dir. Chitral is inhabited by races whose origin is obscure. The quarter of a century the attitude of Great Britain towards successive Amirs has been dictated by this one factor. It was in order to prevent Afghanistan from coming under the influence of Russia that the first Afghan

Anglo-Russian Agreement

Inasmuch as Afghan policies, in their relation to Great Britain, were determined by the Russian menaces, they have recurred with the conclusion of the Anglo-Russian Agreement relating to Afghanistan as follows: I. The British Government disclaims any intention of changing the political position in Afghanistan, and undertakes neither to take measures in Afghanistan, nor to encourage Afghanistan to take measures, threatening Russia. The Russian Government recognises Afghanistan as outside the Russian sphere of influence, and agrees to act in all political relations with Afghanistan through the British Government, and it also undertakes to send no agents to the provisions of the treaty of Kabul of March 21, 1805, and undertakes not to annex or to occupy, contrary to the said treaty, any part of Afghanistan, or to interfere in the internal administration. The reservation is made that the Amir shall fulfil the engagements contracted by him in the aforementioned treaty. III Russian and Afghan officials especially appointed for that purpose on the frontier, or in the frontier provinces, may enter into direct relations in order to settle local questions of a non-political character. IV Russia and Great Britain declare that they recognise the principle of equality of treatment for commerce and agree that all facilities acquired already or in the future for British and Anglo-Indian commerce and merchants shall be equally applied to Russian Commerce and merchants. V These arrangements are not to come into force until Great Britain has notified to Russia the Amir's assent to them. The Amir has never given his adhesion to the Agreement, but Great Britain and Russia have agreed to regard the Agreement as if the Amir had accepted it. On the outbreak of the war His Majesty's Amir declared his complete neutrality, and this policy was pursued during the year with complete and unswerving faithfulness.

TIBET.

Recent British policy in Tibet is really another phase in the long drawn-out duel between Great Britain and Russia in Central Asia. The earliest efforts to establish communication with that country were not, of course, inspired by this apprehension. When in 1774 Warren Hastings despatched Bogle on a mission to the Tashi-Lama of Shigatse—the spiritual equal, if not superior, of the Dalai Lama of Lhasa—his desire was to establish facilities for trade, to open up friendly relations with a power which was giving us trouble on the frontier, and gradually to pave the way to a good understanding between the two countries. After Warren Hastings's departure from India the subject slept, and the last Englishman to visit Lhasa, until the Xongghbad Expedition under the inspiration of Colonel Balcarras, of the Bengal Civil Service, a further attempt was made to get into touch with the Tibetans, but it was abandoned in defence of the opposition of the Chinese, whose suzerainty over Tibet was recognised, and to whose views British statesmen, British statesmen were inclined to pay excessive deference. But the position on the Tibetan frontier remained to be most unsatisfactory. The Tibetans were aggressive and obstructive, and with a view to putting an end to an intolerable situation, a Convention was negotiated between Great Britain and China in 1890. This laid down the boundary between Sikkim and Tibet, it admitted a British protectorate over Sikkim, and paved the way for arrangements for the conduct of trade across the Sikkim-Tibet frontier. These supplementary arrangements provided for the opening of a trade mart at Yatung, on the Tibetan side of the frontier, to which British subjects should have the right of free access, and where there should be no restrictions on trade. The agreement proved useless in practice, because the Tibetans refused to recognise it, and despite their established suzerainty, the Chinese Government were unable to secure respect for it.

Russian Intervention.

This was the position when in 1899 Lord Curzon, Viceroy of India, endeavoured to get into direct touch with the Tibetan authorities. Three letters which he addressed to the Dalai Lama were returned unopened, at a time when the Dalai Lama was in direct intercourse with the Tsar of Russia. His emissary was a Siberian Dorjé, who had established a remarkable ascendancy in the councils of the Dalai Lama. After a few years' residence at Lhasa Dorjé went to Russia on a confidential mission in 1899. At the end of 1900 he returned to Russia at the head of a Tibetan mission of which the head was officially described in Russia as "the senior Yeanlé Khombpa in Lhasa as the senior Yeanlé Khombpa attached to the Dalai Lama of Tibet." This mission arrived at Odessa in October 1900, and was received in audience by the Tsar at Livadia. Dorjé returned to Lhasa to report progress, and in 1901 was at St Petersburg with a Tibetan mission, where as bearers of an autograph letter from the Dalai Lama they were received by the Tsar at Peterhoff. They were escorted home through Central Asia by a Russian force to which several intelligence officers were attached. At the time it was rumoured that Dorjé had, on behalf of the Dalai Lama, concluded a treaty with Russia, which virtually placed Tibet under the protectorate of Russia. This rumour was afterwards officially contradicted by the Russian Government.

The Expedition of 1904

In view of these conditions the Government of India, treating the idea of Chinese suzerainty over Tibet as a constitutional action, proposed in 1903 to despatch a mission, with an armed escort, to Lhasa to discuss the outstanding questions with the Tibetan authorities on the spot. To this the Home Government could not assent, but agreed, in conjunction with the Chinese Government, to a joint meeting at Rhumbza Jong, on the Tibetan side of the frontier. Sir Francis Younghusband was the British representative, but after months of delay it was ascertained that the Tibetans had no intention of committing themselves. It was therefore agreed that the mission, with a strong escort, should move to Gyantse. On the way the Tibetans developed marked hostility, and there was fighting at Tuma and several sharp encounters in and around Gyantse. It was therefore decided that the mission should advance to Lhasa, and on August 3rd, 1904, Lhasa was reached. There Sir Francis Younghusband negotiated a convention by which the Tibetans agreed to respect the Chinese Convention of 1890, to open trade marts at Gyantse, Gartok and Yatung, to pay an indemnity of £500,000 (seventy-five lakhs of rupees), the British to remain in occupation of the Chumbi Valley until this indemnity was paid off at the rate of a lakh of rupees a year. In a separate instrument the Tibetans agreed that the British Trade Agent at Gyantse should have the right to proceed to Lhasa to discuss commercial questions. If necessary

Home Government interferences

For reasons which were not apparent at the time but which have since been made clearer, the Home Government were unable to accept

The Anglo-Russian Agreement

The reason underlying the action of the British Government in modifying, in such material particulars, the Convention of Lhasa was apparent later. The Anglo-Russian Agreement was in process of negotiation, and under that Agreement Great Britain was pledging herself not to annex any portion of Tibetan territory, nor to send a representative to Lhasa. A seventy-five year occupation of the Chumbi Valley would have been inadvisable from annexation. The portions of the Anglo-Russian Agreement which relate to Tibet are as follows

Article I.—The two High Contracting Parties engage to respect the territorial integrity of Tibet and to abstain from all interference in its internal administration.

Article II.—In accordance with the admitted principle of the suzerainty of China over Tibet, Great Britain and Russia engage not to enter into negotiations with Tibet, except through the intermediary of the Chinese Government. This engagement does not exclude the direct relations between the British Commercial Agents and the Tibetan authorities, provided for in Article V of the Convention between Great Britain and Tibet of the 27th April 1904, and confirmed by the Convention between Great Britain and China of the 27th April 1906, nor does it imply the recognition of the latter as a State by Great Britain and China. It is clearly understood that British subjects of Great Britain or of Russia may enter into direct relations on strictly commercial matters with the Dalai Lama, and the representatives of British and Russian Governments of Great Britain and Russia may engage as far as they are concerned, to allow these relations to continue. Article III.—The British and Russian Governments of the present arrangement shall remain in force, subject to the ratification of the same by the Imperial Parliaments of Great Britain and Russia.

the full terms of this agreement. The indemnity was reduced from seventy-five lakhs of rupees to twenty-five lakhs, to be paid off in three years, and the occupation of the Chumbi Valley was reduced to that period. The right to despatch the British Trade Agent to Lhasa was withdrawn. Two years later (June 1906) a Convention was concluded between Great Britain and China regarding the position in Tibet. Under this Convention Great Britain agreed neither to annex Tibetan territory, nor to interfere in the internal administration of Tibet. China undertook not to permit any other foreign State to interfere with the territory or internal administration of Tibet. Great Britain was empowered to lay down telegraph lines to connect the trade stations with India, and it was provided that the provisions of the Convention of 1890, and the Trade Regulations of 1893, remained in force. The Chinese Government paid the indemnity in three years and the Chumbi Valley was evacuated. The only direct result of the mission was the opening of the three trade marts and the establishment of a British Trade Agent at Gyantse.

Article IV—The two High Contracting Parties engage neither to seek nor to obtain, whether for themselves or for their subjects, and concessions for railways, roads, telegraphs, and mines, or other rights in Tibet

Article V—The two Governments agree that no part of the revenues of Tibet, whether in kind or in cash, shall be pledged or assigned to Great Britain or Russia or to any of their

Annexed to the Agreement was a re-affirmation of the declaration for the evacuation of the Chumby Valley after the payment of three annual instalments of the indemnity, provided that the trade marts had been effectively opened for three years and that the Tibetans had complied in all respects with the terms of the Treaty.

Chinese Action

The sequel to the Anglo-Russian Agreement

The political importance of Tibet

Tibet

the difficulty of defining Outer and Inner

Convention, it is understood, has not been

was to be relatively much stronger But this

Eastern Tibet, in which the Chinese position

seem autonomous zone was to be constituted in

Resident at Lhasa with a suitable guard A

proposed, with the right of China to maintain a

cognised the complete autonomy of Tibet

a Convention was initiated in June which as-

been made on the subject, it is understood that

issues Whilst no official pronouncement has

Minister to the Dalai Lama, thrashed out these

China and Mr Long Chen Shatra, Prime

ment of India, Mr Ivan Chen, representing

McMahon, Foreign Secretary to the Govern-

This Convention met at Simla when Sir Henry

discuss the relation of the three countries

agreed to the constitution of a conference to

in the internal administration of Tibet, and

China is to have no right of active intervention

British Government The Chinese Govern-

ment subsequently accepted the principle that

was met by a very vigorous protest from the

unequal footing with other provinces of China,

and that Tibet was to be regarded as an ad-

sphere of Chinese internal administration,

Republic saying that Tibet came within the

declaration of the President of the Chinese

in relation to these changes He said the

stated the policy of the British Government

in the House of Lords on July 28, Lord Morley

The Dalai Lama returned to Lhasa, and in 1913,

India, by way of Darjeeling and Calcutta

sought escape not through China, but through

in a hopeless case, they surrendered, and

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China, surrounded by a hostile and infuriated

Chao Erh-feng Cut off from all support from

Sechuen, and one of the first victims was

tion in China That revolution broke out in

matter might have rested, but for the revolu-

compelled again to dispose him Here the

such an impossible person that they had been

Chinese remarked that the Dalai Lama was

were respected by the Tibetans Finally, the

the must be in a position to see that her wishes

responsible for the good conduct of Tibet,

overlooking Tibet into a province, but that being

in order, that China had no intention of con-

Tibet than were necessary for the preservation

ment was that no more troops had been sent to

tained The attitude of the Chinese Govern-

that an effective Tibetan Government be main-

frontier, especially with Nepal, and pressed

terms with other neighbouring States on inter-

country which was a neighbour, on intimate

who indifferent to disturbances in the peace of a

while disclaiming any desire to interfere with

the internal administration of Tibet, could not

the political importance of Tibet in relation

Anglo-Russian Agreement So long as that

instrument is in force, it tends to decline But

no treaties are everlasting The question has

been admirably summed up by Sir Valentine

Chitral ("The Middle Eastern Question"),

written before the Agreement was reached

"What it would be impossible to view without

some concern" he wrote "would be the as-

surance of a foreign and possibly hostile power

Political Importance of Tibet

China's efforts. Cut off from all support from India, surrounded by a hostile and infuriated population, the Chinese troops in Tibet were in a hopeless case, they surrendered, and sought to escape not through China, but through India, by way of Darjeeling and Calcutta. The Dalai Lama returned to Lhasa, and in 1913, the House of Lords on July 28, Lord Aldrey stated the policy of the British Government in relation to these changes. He said the declaration of the President of the Chinese Republic saying that Tibet came within the sphere of Chinese internal administration, and that Tibet was to be regarded as an unequal footing with other provinces of China, was met by a very vigorous protest from the British Government. The Chinese Government subsequently accepted the principle that China is to have no right of active intervention in the internal administration of Tibet, and agreed to the constitution of a conference to discuss the relation of the three countries. This Convention met at Simla when Sir Henry McMahon, Foreign Secretary to the Government of India, Mr. Ivan Chen, representing China and Mr. Long Chen Shatra, Prime Minister to the Dalai Lama, thrashed out these issues. Whilst no official pronouncement has been made on the subject, it is understood that a Convention was initiated in June which recognized the complete autonomy of Tibet proper, with the right of China to maintain a Resident at Lhasa with a suitable guard. A seem autonomous zone was to be constituted in Eastern Tibet, in which the Chinese position was to be relatively much stronger. But this Convention, it is understood, has not been ratified by the Chinese Government, owing to the difficulty of defining Outer and Inner Tibet.

Chinese troops overran Tibet and took up his abode in Darjeeling, whilst was chased to the frontier by Chinese troops.

Dalai Lama that he fled from Lhasa, and by the irony of fate sought a refuge in India. He Dala Lama was moving on Lhasa so alarmed the report that a strong Chinese had already been expatriated by the pressure of the Chinese sovereignty. The report that a strong Chinese spiritual pope The Tibetans had already of all temporal power and preserve him as expected to resume the temporal and spiritual The Chinese intended to deprive him prior to ment had little in common. The Dalai Lama and of the Chinese Government But it was soon apparent that the ideas eluded stages, he arrived there at Christmas to resume his duties at Lhasa. Moving by 1808, was received by the Court, and despatched he proceeded to Peking, where he arrived in Lhasa, had taken refuge in Si-ning. Thence Unga, the seat of another Buddhist Pontiff, time the Dalai Lama, and his presence at treating the people with great severity. Mean- city, marching through eastern Tibet and the proceeded gradually to establish his authority, was appointed Resident in Tibet meeting Viceroys in the neighbouring province of China. In 1908 Chao Shih-feng, to convert Tibet from a vassal state into a o convert Tibet from a vassal state into a ected at Lhasa. To this end she proceeded that she had the power to make her will res- inevitable that China should take steps to see having been a "constitutional action." It was ons of Tibet. In the past this suzerainty would be held responsible for the foreign rela- tions of Tibet. It was asserted that she re- sponsibility of signing the Treaty. Now the responsibility of China over Tibet had been ex- hibited officials who would undertake the responsibility of signing the Treaty. Now the responsibility of China over Tibet had been ex- hibited officials who would undertake the responsibility of signing the Treaty. Now the responsibility of China over Tibet had been ex-

Later Stages

The British Government, acting on the representations of the Government of India, made strong protests to China against this action. They pointed out that Great Britain,

Sawbwas or hereditary chiefs, subject to the guidance of Superintendents and Assistant Superintendents. The Northern Shan Rail-way to Lashio, opened in 1903, was meant to link with China, but this idea has been put aside, for it is seen that there can never be a trade which would justify the heavy ex-pen-Siam are excellent

* PERSIAN DEBT TO BRITAIN.

A Parliamentary Paper sets out the out-standing debt of the Persian Government to the British and Indian Governments, as follows			
Portion of Anglo-Indian Loan of 1903-4 (repayable by March, 1928)	314,281	15	1
Anglo-Indian advance of February, 1912	100,000	0	0
Anglo-Indian advance of August 1912, after defeat of Gendarmerie in Fars	25,000	0	0
Anglo-Indian advance of November 1912, for use of Governor-General of Fars	15,000	0	0
The 1903-5 loan bears interest at 5 per cent, and all other advances bear interest at 7 per cent			
Anglo-Indian advance of April, 1913, for general purposes of administration, including £30,000 for such purposes in Fars and £10 000 for the Bu-shire Custom House	200,000	0	0
Anglo-Indian advance of May, 1913, for gendarmerie purposes in Fars	100,000	0	0
Total	575,281	16	1

* By agreement with Great Britain and Russia these loans have been placed under a moratorium, in order to assist the Persian Government financially

The Anatolian railway company were apparently unable to handle this new concession and financial negotiations, which resulted in the British railway convention of March, 1903, this was a much discussion in England, owing to the apparent intention of the Germans to research on the Persian Gulf. Attempts were made by the German group to secure the participation of France and Britain in the undertaking. They were successful in France, but in Britain, though Mr. Balfour's government was favourable, strong objections were raised to the conclusion of the Board of Directors which was regarded as a control in principle. It was regarded as a German political move and participation was refused.

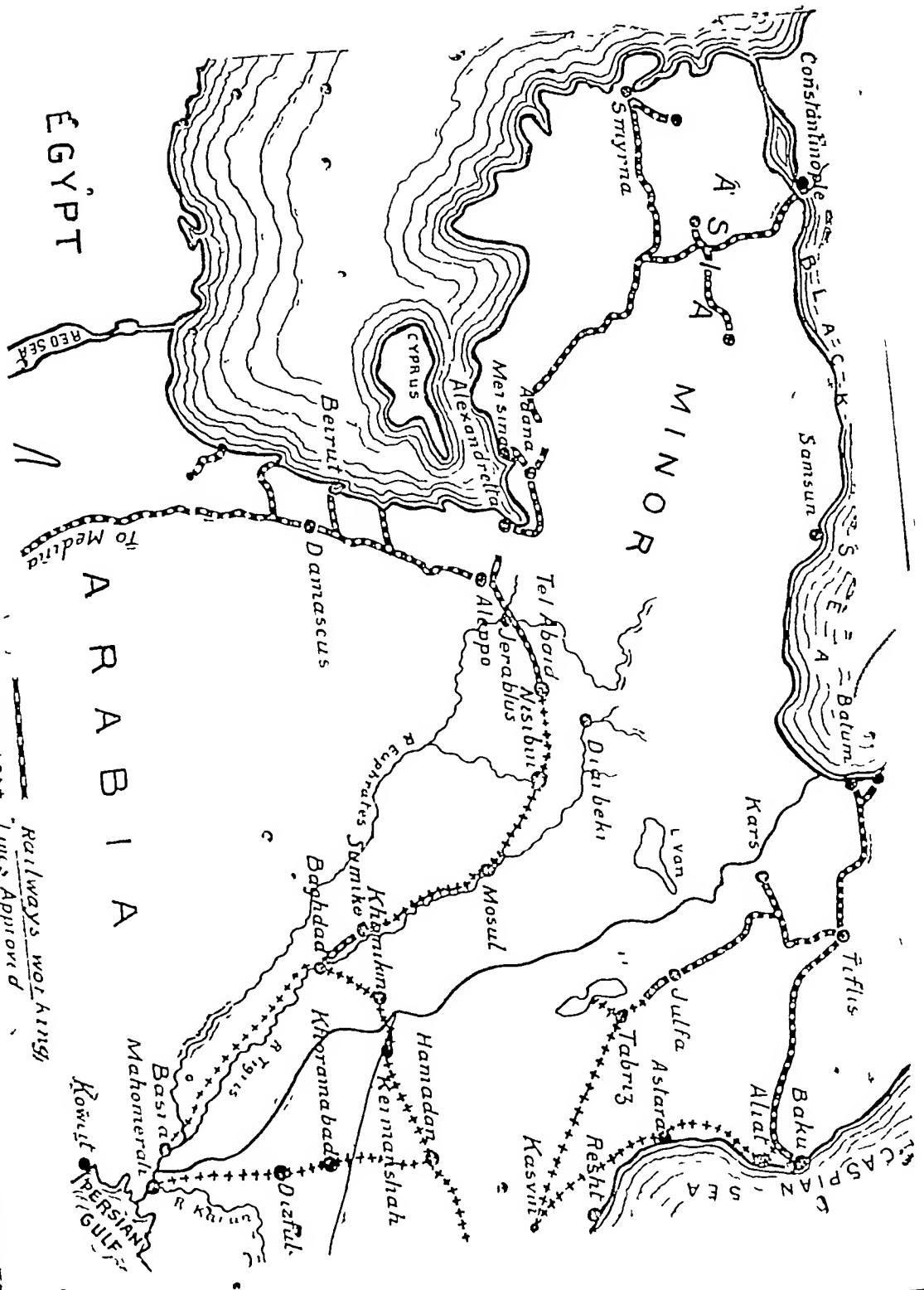
The financial terms, with a Turkish loan of 250,000, and the company retained a profit of at least 12 millions sterling on this part of the line. In the second section the Taurus range is being unconcerned and construction is more difficult and more costly. The railway must for a long time be carried through which it passes from the country in a heavy burden on Turkish finance. The construction of the railway must for a long time be carried through which it passes from the country in a heavy burden on Turkish finance. The construction of the railway must for a long time be carried through which it passes from the country in a heavy burden on Turkish finance.

The actual position in regard to the railway and the Persian Gulf have been quickened. The actual position in regard to the railway and the Persian Gulf have been quickened. The actual position in regard to the railway and the Persian Gulf have been quickened.

The German group holding the Anatolian railway concession was granted, in 1902, a further concession for extending that system from Konya, the southern terminus, through the Taurus range to the extreme eastern limit of the Persian Gulf, and by way of Mosul, Bagdad and Basrah to the Persian Gulf. This concession was subject to the passage of the British Government and France, in 1913, to regulate the railway route through the pass of Diarbekir and to that route, on the respective financial positions in regard to the railway, so as to avoid future conflict of interest.

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Map of the Baghdad Railway



Atlanas was handed over for traffic on June 1, 1911, and it was reported last summer that it was to be completed and open for traffic a distance of 100 miles had been included by the Government from Bombay to Baghdad in official estimate of 1911 out of a total of 1,020 miles. It was reported that the British war had ended the year before last, and that the Government had decided to construct a railway from Baghdad to Tehran, via Kermanshah and Hamadan to Baghdad to complete the extension within two years of the completion of the railway from Kermanshah. It was agreed to build a railway from Kermanshah into the West Persian mountains leads into the West Persian mountains to Kermanshah where a pass through the mountains was proposed to build a line from Kermanshah to Baghdad to complete in 4 years to be completed in 4 years.

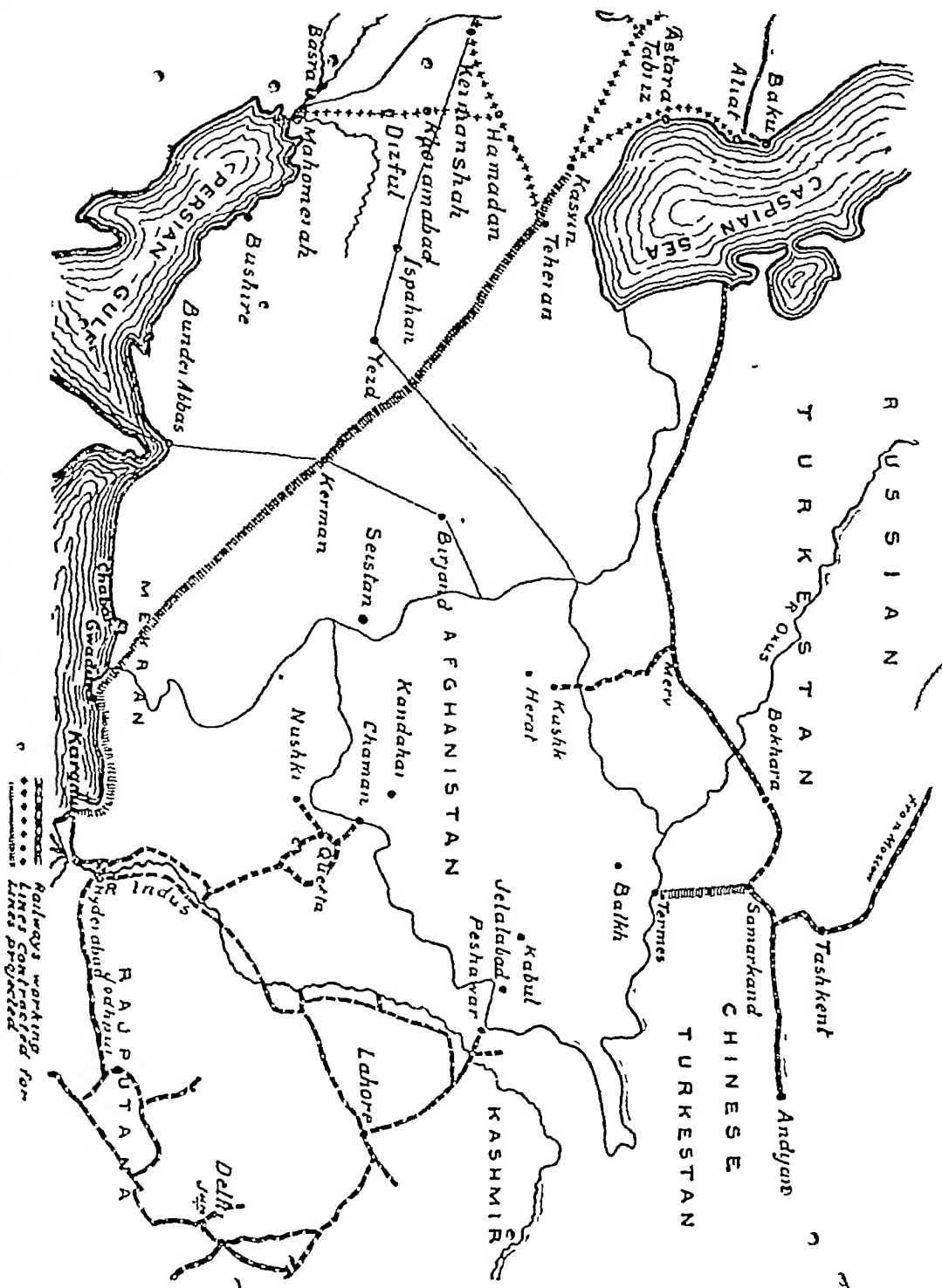
Germany also proposed to build a line from Baghdad to Kermanshah, via Kermanshah and Hamadan to Baghdad to complete the extension within two years of the completion of the railway from Kermanshah. It was agreed to build a railway from Kermanshah into the West Persian mountains leads into the West Persian mountains to Kermanshah where a pass through the mountains was proposed to build a line from Kermanshah to Baghdad to complete in 4 years to be completed in 4 years.

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A Trans-Persian line to join the Russian Caspian system with the Indian Railways

Construction was meant to be carried on the Baghdad-Mosul section, material for the latter being taken up-river from Basra to Baghdad by special barges and tugs. The line from Baghdad to Basra, about 40 miles north of Baghdad to Basra, was completed and was open for traffic on the latter part of the summer of 1911. It was reported that the line from Baghdad to Basra was completed and was open for traffic on the latter part of the summer of 1911. It was reported that the line from Baghdad to Basra was completed and was open for traffic on the latter part of the summer of 1911.

Construction was meant to be carried on the Baghdad-Mosul section, material for the latter being taken up-river from Basra to Baghdad by special barges and tugs. The line from Baghdad to Basra, about 40 miles north of Baghdad to Basra, was completed and was open for traffic on the latter part of the summer of 1911. It was reported that the line from Baghdad to Basra was completed and was open for traffic on the latter part of the summer of 1911. It was reported that the line from Baghdad to Basra was completed and was open for traffic on the latter part of the summer of 1911.



at assumed proportions of practical importance in the life of 1911. Both the Indian and the British railways are fully developed up to the points which would be the limit of a trans-Asian line, and the following considerations are up to the period of the war. The Russian railway system in the Black Sea, to Baku on the west coast of the Caspian. Incidentally, article 59 of the Treaty of Berlin provides that Britain shall be a free port essentially commercial. The Persian Foreign Minister on February 6, 1913, signed a concession to the Russian Julia-Tabriz and Enzeli-Abbas Road Companies, giving the right to construct a railway from Julia to Tabriz (93 miles) with an extension to Lake Urmiah and a preferential right to build a railway from Tabriz to Kazvin, Julia and Tiflis, which were at that time equipped with a motor omnibus service, on which a motor omnibus service was maintained. The road is the property of the concessionary company, so that sections of it could conveniently be utilized for railway construction, the work of construction the line being thus expedited. The railway was to be begun within two years of the granting of the concession and completed within six years and a time limit of eight years is fixed for the extension of the line from Tabriz to Kazvin, a further distance of 250 miles. The concession runs for a period of seventy-five years. Option is reserved to the Persian Government to purchase the Julia-Tabriz line after a lapse of 35 years. It was announced in Tiflis that the line had been built from Julia to Dardaz, some 13 miles south of Julia and news from Russia thus indicated that it would be completed to Tabriz in the spring of 1913. The Russian Government Department of Railways in June 1913, approved a concession to a Russian Syndicate for the construction of the line from a point on the railway close to Baku to Astrak, where the Russian and Persian territories meet. More than one possible starting point for the trans-Persian Railway is therefore in course of preparation.

On the Indian side, the railway system is fully developed up to Baluchistan, close to the Persian frontier a broad gauge line running through Quetta to Nushki was constructed with the intention of its development for the benefit of trade which already runs by caravan along the "Nushki trade route" to the Persian province of Seistan. The Russian Government favoured linking up the trans-Persian railway with the Indian railways at this point. But the suspicious saw a strategic reason for this preference. The Indian Government found itself unable to approve the connection. They insist that the line shall run either from Yazd or Kerman to the sea-board. This condition is absolute. There remains, then, a connection with the Indian North-Western Railway at or near Karachi.

The necessary financial arrangements for the preliminary work in connection with the proposal, which came from Russia, to connect the railways with Russia and India were completed in January, 1912. It was then stated that the Russian Committee were already in possession of a nearly complete survey of more than 300 miles from Astrak to Teheran and the length of the line from there to Gwadar was 1,200 miles. Perso-Baluch Frontier is some 1,200 miles South after this announcement, Mr. Johns was appointed by the Government of India to survey a railway route between Karachi and Gwadar, and found a good line with a general gradient of 1 in 250, the steepest being 1 in 90. Twelve of the principal Russian Banks were interested in the project and the desired amount of English and French capital was guaranteed, one English banking house having even offered to furnish the whole of the English quota. The French concerns are the Banque de Paris et des Pays Bas, the Credit Lyonnais, the Societe Generale, the Comptoir National, the Banque de l'Union Parisienne and Count d'Arnaud.

Meetings of the international financiers concerned in the scheme were held and a So-called Etudes was formed. M. G. Kalandar, formerly a distinguished member of the French diplomatic service, was selected as President, with Sir William Garstin as British Vice-President and M. Homblot, ex-President of the Russian Duma, as Russian Vice-President. The Society consists of a council of administrators of 24 persons. The Governments of all three countries gave their approval to the enterprise and on the firm representations of the British Foreign Office a formal memorandum was drawn up providing for absolute equality of British, Russian and French control in the undertaking. It was agreed that in the northern half Russian interest should be 60 per cent, French interest 33 1/3 per cent and British 6 2/3 per cent, and in the southern half Russian interest 6 2/3 per cent, French 33 1/3 per cent, and British 6 2/3 per cent. The proposal was that interests should be equal for the whole line. The French and Russian would thus be equal. The French and Russian total interests of the parties in the whole line 33 1/3 per cent, and British 60 per cent. The half Russian interest 6 2/3 per cent, French 33 1/3 per cent, and British 6 2/3 per cent, and in the southern half 60 per cent, French interest 33 1/3 per cent and British 6 2/3 per cent.

No announcement has yet been made of the settlement of further details in regard to the line. Its general route will presumably be from Astrak via Teheran to Kerman or Yazd, and thence to either Bander Abbas, at the entrance of the Persian Gulf, or Chahar, a point on the Mexican Coast, about 100 miles west of Gwadar. As to the cost, £18,700,000 was the amount first declared by Russian experts as sufficient to cover the cost of construction and provision of rolling-stock for the 1,400 miles of railway in Persian territory. English experts then believed that £13,000,000 would be sufficient. Further investigation has led competent experts on the English side to say that the capital involved must eventually total £30,000,000 at least. The line presents no great engineering difficulties, but there would be a great variety of gradients throughout its length, the line will rise at several points to some thousands of feet above sea-level, and numerous detours will be necessary both for gradients and to serve local needs.

Central Asian Lines

There remains the possibility of linking up the Russian and Indian railway systems by

way of Afghanistan. But many strategic objections have been raised to the trans-Persian railway and these considerations are strenghened tenfold in regard to bringing the Russian Central Asian lines nearer Kabul. Russia has in recent years considerably increased her railway facilities in Central Asia. The line from Krasnovodsk on the East Caspian shore now extends, via Aler and Bokhara and Samarkand, to Andijan, which is some 350 miles north-west of Kashgar, the important town of Chinese Turkestan. The great network of railways in European Russia is also now directly connected by the Orenburg line with Tashkent, and a connecting line links it up with the southern railway just described. From Aler a line runs south to Kaskh, on the Afghan border, within a few miles of Herat. It is reported that Russia intends building another line extending the Orenburg-Tashkent connection to Termez, a point on the Oxus 60 miles or less from Balkh, which, again, is close to the important strategic point, Miana-r-Shahr. It is doubtful whether in a race, Russia, starting from Termez, or Balkh, starting from the Khyber, could reach Kabul first. Termez, where, it is stated, Russia proposes to throw a bridge across the Oxus, is the highest point at which that river is navigable from the Aral Sea. The suggestion has often seriously been made in recent years that the Russian line from Aler to Herat should be linked to the Indian line which from Quetta proceeded to the Afghan border at Chaman. The distance between the two railheads is about 520 miles.

Persian Gulf Lines

Britain's special interests in regard to Persian railways are primarily associated with lines running inland from the Persian Gulf, to supersede the old mule routes. Special schemes for a railway from Mohammerah (at the opening of the Karun Valley, where the Karun River runs into the Shahr-el-rab, just below Basra, near the Turkish border), northwards into the rich highland country of Western Persia. Britain has long established special relations with the Karun Valley and has a large trade there. An agreement was reached between the Persian Government and the representative of a British Syndicate in February, 1913, for the construction of a railway from Mohammerah to Khorramabad, a two years' option, during which period the Persian Government undertook to decide, on the completion of the survey, whether it would build the railway as a State line under contract with the Syndicate, or whether it would grant the Syndicate a concession for the construction of the line. The Syndicate immediately began preliminary operations. Four English engineers were sent out, and exactly

two months after the agreement was announced they proceeded to Dizful, on the route of the line, for the purpose of making preliminary surveys. The Syndicate is composed of six groups, of which four are already connected with Persian commerce, viz., the Anglo-Persian Oil Company, the Imperial Bank, the Lushmutes and Tigris Steam Navigation Company (Messrs Lynch), and the British India Steam Navigation Company. The Syndicate is prepared to undertake much more extensive railway construction in Southern Persia. As Russia will eventually build a line from Teheran to Khamkin, the Khorramabad line will probably be linked with this line, at Hamadan or elsewhere, and Persia will thus have two routes from the Gulf to the north. The latest reports state that the survey work on the line from the Gulf to the north "hung up" owing to the disturbed state of the Turkestan tribes around Dizful. The Persian Government agreed to a slight modification of the terms of the concession to meet the situation then created and Sir D. Grey stated in the House of Commons that "every effort will be made to proceed with survey as soon as the situation in Turkestan appears to the responsible authorities to justify such a step. It is contemplated that the Swedish gentleman, which has done very good work recently in other parts will devote their attention to Turkestan with the object of paying that part of the country as they have done in some other parts." As a result of repeated Anglo-Russian applications the Swedish Government permitted General Hjalmarsson, the head of the Persian gendarmerie, to return to Persia in November, 1914. The war has resulted in great unrest, as a result of German instigation, in Western Persia.

Period of Transit

It is commonly said that the Trans-Persian railway would bring India within eight days of London. The possibility was demonstrated by the performance of a party who travelled from London to Persia in 1914 and sent the following details of their journey to the *Times*. The party left London by the S-35 p.m. train on a Saturday and arrived at Baku at 10.20 p.m. (London time, say, 7.35 p.m.) on the following Thursday, and at Banzel, on the south-west shore of the Caspian, (reached by steamer from Baku), at 6 a.m. on the following Saturday—that is, within six and a half days from London. They travelled via Folkestone, Rishling, Berlin, Warsaw, Snamgersk, Rostoff and Baku, and were detained at War, 12 hours more, thus reducing the actual travel time to 5½ days, which was a "record." There remained, at the end of their journey, only the trans-Persian stage, which it is hoped to cover by the new line, so that an express service from London to Delhi ought to be easily possible within the eight days.

Foreign Consular Officers in India.

Name	Appointment	Port
Argentine Republic		
Mr. C. W. Rhodes	Vice Consul	Calcutta
Austria Hungary		
The American Consuls are in charge of Austro Hungarian interests during the War		
Belgium		
Mr. Robert Chalidon	Consul	Bombay
Mr. J. H. Fife	Do	Calcutta
Mr. E. S. Murray	Do	Karachi
Mr. G. R. Walker	Do	Aden
Mr. W. Macdonald	Do	Madras
Mr. H. A. Scott	Do	Rangoon
Mr. J. Linde	Do	Akyab
Mr. R. W. Watson (in charge)	Vice-Consul	Calcutta
Bolivia		
Kumar Shyama Kumar Tagore	Consul General	Calcutta
Brazil		
Mr. Joaquim D. S. Nabapit	Consul	Calcutta
Mr. F. A. D'Souza	Do	Calcutta
Dr. Edward B. Underwood, M. A., M. D., F. R. S.	Vice-Consul	Bombay
Mr. J. B. Halliday	Do	Rangoon
Mr. J. F. Brown	Commercial Agent	Do
Chile		
Senor Don A. D. Garces	Consul-General	Calcutta
J. G. Bendien (Acting)	Vice Consul	Bombay.
Mr. R. Menzies	Do	Madras
Senhor L. Grommers	Do	Calcutta
Mr. A. R. Leishman	Do	Chittagong
Mr. C. Kaufeld	Do	Rangoon
China		
Mr. Heimo Yung Hsi	Consul	Rangoon.
Costa Rica		
Kumar Shyama Kumar Tagore	Consul	Calcutta
Cuba		
Mr. John Zuberhuler (Acting) on leave	Honorary Consul	Bombay
Mr. Blasio Pares (in charge)	Do	Do
Vacant	Do	Calcutta
Denmark		
Mr. C. J. Lihon	Consul General	Calcutta
Mr. A. F. Sells	Do	Bombay
Mr. E. S. Murray	Do	Aden
Mr. R. J. Menzies	Do	Madras
Mr. I. B. Stevens	Do	Rangoon
Mr. L. B. Stevens	Vice-Consul	Karachi
Mr. S. G. L. Eustace	Do	Calcutta.
Mr. P. J. Christensen	Do	Moulmein

Name	Appointinent	Port.
Ecuador		
Kumar Shyama Kumar Tagore	Consul	Calcutta
France		
M. Dejean de la Batie	Consul-General	Calcutta
M. E. Nicaul	Chanceller	Do
M. C. Barret	Consul	Bombay
M. H. Martin	Vice-Consul	Do
M. M. Ries	Consular Agent	Aden
M. R. E. L. Worke	Do	Karachi
M. R. E. L. Worke	Do	Madras
Vacant	Do	Chittagong
Do	Do	Kangoon
Do	Do	Myab
Do	Do	Cocanada
Do	Do	Tellicheerry
Do	Do	Do
Germany		
The American Consuls are in charge of German interests during the War		
Greece		
Mr. E. Apostolides	Consul	Calcutta
Gautemala.		
Mr. H. J. Sanders	Consul	Calcutta
Italy		
Marquis F. Medici di Marignano	Consul General	Calcutta
Car. G. Cecchi	Do	Aden
Car. Dr. G. Gorno	Consul	Bombay
Mr. J. Merkle	Do	Kangoon
Vacant	Vice-Consul	Calcutta
Signor Alfredo Manzato	Do	Calcutta
Mr. Gordon Fraser	Do	Bombay
Vacant	Consular Agent	Madras
Vacant	Do	Moulmein
Mr. H. J. Guy, R. N. R.	Do	Akyab
Signor Aldo Viola	Do	Bassah
Japan.		
Mr. Kametaro Tiyima Shoroku	Consul-General	Calcutta
Mr. Y. Shibata	Do	Do
Mr. Yasukichi Yatabe	Consul	Bombay
Liberia		
Dr. Benode Behari Banerjee	Consul	Calcutta
Dr. C. H. Freeman Underwood, M.D.	Do	Bombay
Mexico.		
Mr. R. L. B. Gall	Consul	Calcutta

[illegible]

Name	Appointment.	Port
Russia.	Consul-General Do Do Vice-Consul Do	Calcutta Aden Calcutta Do
Siam	Consul Do Do Do	Calcutta Rangoon Moulmein Do
Spain	Vacant Mr B J B Stephens Mr A H Russell Mr O Van-der-Gucht	
Sweden	Jose Tazongly Espanol Mons L Grezoux Mons M Ries Mr J S Walker	Bombay Calcutta Aden Rangoon
Turkey	Mr W L Wanklyn Mr E R Logan Mr L Volkart Mr A E Adams Mr F Hicks Mr T H Wheeler Vacant	Calcutta Madras Bombay Aden Rangoon Calcutta Moulmein.
The American Consuls are in charge of Turkish interests during the war		
United States of America	James A Smith J P Dougherty Samuel C Reat H B Osborn Lucien Menminger Frank C Rich Walter A Leonard John A Nye Vacant Selby S Coleman James Oliver Laing E L Rogers Vacant Arthur G Watson H W Timewell	Calcutta Do Rangoon Do Madras Do Colombo Do Bombay. Do Karnah. Do Bustral, Persian Gulf Chittagongs Calcutta
Uruguay.	Mons C Jamhon	

which arrived in 1754

who appeared in India in 1805. Before this, Struensee with the French

Army of India was engaged in constant

fortified position was occupied by the First French, whom Duplex had by 1750 raised

Water was acquired in 1910, but in 1951 the

Byro Coote completed the downfall of

(10) "The four years before the French ap-

and a complement of 255 men, of whom only

of the French was completed, and the fort-

While the origin of the regular sepoy army to a few settlements on the coast, the principal

...of which, Pondicherry, was captured in 1793

enrolled an Indian force in Madras, it is in- this much, they had now to contend with the

...ing to note that while the Government of Bombay prior to 1947 had a number of independent states had

...and the decline of the Mughal Empire, which

a captain, nine lieutenants, fifteen ensigns, Delhi and others by the Nabab's princes who

of Sivaji, while in Mysore Hyder Ali, a Muzaffar

Private letter with 31 Masters (pro-
fessors) and 900 teachers—discussing the place of the Hindu Bible as great and

ably Coan... These were distributed in prolonged struggle took place with the ruler

10,311 rupees. There was in addition a kind of even company and money was made.

part. This struggle extended over nearly twenty years and terminated only with the death of

at a monthly cost of 312 rupees. They were Hyder's son and successor Tipu when his capital

but supplied their own weapons—swords and

The extension of British territory had

with France in 1744, the forces at Bombay

company was raised already in 1740 the

great distances and independent territories by

in the European fashion, and the fall of Bombay troops had taken part in the wars

induced the English East India Company to

These armies had grown in strength and

Stringer Lawrence landed at Fort St David
Lord Cornwallis, wrote to the Duke of

English foothold in India was then precarious

ance of the native troops gave me the

the English company to form a larger military establishment, the new commandant strongly

set about the organisation and discipline of

the but little food to which they will soon be brought to a great ditch of discipline."

Reorganisation of 1796

Army, of which Lawrence eventually became

13,000 strong, the native troops numbered some

estimates, similar companies in Bombay and Bengal became the 1st Bombay and 1st Bengal regiments of two battalions each in Bengal

Fusiliers. The native infantry was similarly organized by companies and battalions. The establishment of each

Clive, who was his contemporary, and military two-battalion regiment was 1 colonel command-

10. 1. 1990 г. (подпись и фамилия ответственного лица) — В. П. ПУШКОВ П/ОП — С. А. ПУШКОВ

with barbaric pagantry at Peshawar, but the British army had lost the prestige of invincibility which it had gained during a hundred years of victory throughout peninsula India. It is convenient here to give some account of the Sikhs whom our army met a more formidable enemy than they had hitherto encountered, who have since supplied many of the best soldiers in its ranks, and who less than nine years later served with valour and ability beneath our colours in the great struggle of the sepoy war. In the early part of the sixteenth century Bha Nanyk, a peasant of a village near Lahore, founded the religious sect which was to play such an important part in the history of India. The religion he preached was pure monotheism and in no way tainted in its original form. The new faith, founded on the Unity of God and the religious equality of man, gradually made great headway, the philanthropy and tolerance of its founder appealing to the hearts of men. The Gurus who succeeded Nanyk were active in their teaching, they founded and built the Golden Temple at Amritsar, and the sect began to assume a political significance. This brought them into conflict with the Mughal Government, and Sikhism was subjected to that persecution which was alone necessary to transform it into a militant political force. Har Govind, the Sixth Guru, became a martyr as well as a spiritual leader, and on his death in 1645 left the Sikhs a strong and militant power.

After two hundred years the Sikh faith became established as a guiding principle to work its way in the world. Nanyk disengaged his little society of worshippers from Hindu idolatry and Mahomedan faith, Amar Das preserved the community from declining into a sect of ascetics, Arjan gave his increasing followers a written rule of conduct and a civil organisation. Har Govind added the use of arms and a military system, Govind Singh bestowed upon them a distinct political existence, and inspired them with the desire of being socially free and naturally independent. Sikhism arose where fallen and corrupt Brahminical doctrines were most strongly acted on by the vital and spreading Mahomedan belief. As in the case of other sects whose views are recorded in the history of the world, religious persecution gave to Sikhism a stimulus to permanence and progress. With varying fortunes the power of the Sikhs was consolidated, and by 1785 they were predominant from the frontiers of Oudh to the Indus. Their prestige as illustrated in the story of the traveller Foster, who describes the alarm caused to a petty Chief and his people by the appearance of two Sikh horsemen under the walls of their fort. The great Chief Ranjit Singh, the "Lion of the Punjab," established his ascendancy throughout that province, and with the aid of European military adventurers such as Ventura and Alhard organised a powerful regular army. Ranjit Singh had the wisdom to keep on friendly terms with the English, but his death was the signal for internal dissensions which in course of time rendered the army the principal power in the state, and brought them into conflict with their English neighbours.

Sikh Wars

A large portion of the Bengal Army under Sir Hugh Gough took part in the first Sikh War in 1819, in the opening battle of which, at Andak and Kerosahpur, the native troops did not greatly distinguish themselves, although they retrieved their reputation in subsequent actions when the Sikhs were defeated at Aliwal and Sobram. But the Bengal Army had for some time been undergoing that deterioration of discipline which culminated a dozen years later in the mutiny. They were no longer the soldiers of Luck and Laswara, the heroes of Laswara, of Serinagar, and of expeditions overseas in the snows and deserts of Afghanistan and amid the bloody scenes of the Khurd Kabul Pass and Jagdalah. They had lost much of their ardour and prestige, while they had witnessed the defeat and slaughter of their hitherto invincible English comrades. They fought well on occasion, stimulated by the presence and example of English regiments, but their training and discipline fell much to be desired. The second Sikh War followed a few years later, when, after the bloody battle of Chillianwalla, the Sikhs were finally vanquished at Gujrat. The other campaigns belonging to this period were the conquest of Sind by Sir Charles Napier and the Second Burmese War. On the eve of the Mutiny there were in the Bengal Army 21,000 British and 137,000 native troops, in the Madras Army 8,000 British and 49,000 native troops, and in Bombay 9,000 British and 45,000 native troops. The conquest of the Punjab extended our frontier to the country inhabited by those turbulent tribes which have given so much trouble by their raids and forays, while they have supplied many soldiers to our army. To keep order on this north-western limit of the Empire the Punjab Frontier Force was established, and was constantly engaged in small expeditions which, while they generally involved but little bloodshed, and involved much arduous work in the pursuit of an elusive enemy.

The Indian Mutiny

The history of the Indian Army in general and of the Bengal Army in particular is so closely bound up with the great Mutiny of 1857 that it is necessary to enter into some account of the causes which brought about that catastrophe, and to sketch in outline its chief events. In 1856 Lord Dalhousie resigned the Viceroyalty of India after a term of office marked by strenuous activity and by an extensive policy of annexation. From Oudh a dissolute and incompetent king was removed and his territories were annexed to the British dominions, an act which could not but have a disturbing effect in a country where the natural and hereditary ruler of the people were regarded with the greatest veneration. The territory of Oudh was also annexed, the Government refusing to allow the Rani to adopt an heir to succeed her deceased husband, and the Rana of Bikaner, adopted son of the last Peshwa Baji Rao, was refused a compensation of his adoption. The father's pension. These two latter, the Rani of Jhansi and Nana Sahib, became the bitterest and most cruel of our enemies. The

part of a hundred years Under the old chaotic system the mobilisation scheme provided for the despatch of two armies, one through the Khyber, the other by way of Quetta to Kandahar from the North-West alone, whence the conquering hordes of all the invaders were marched as recorded in history had poured from subject to menace from without

But under the system then existent the measures arranged for defence provided for a force of only four Divisions of all arms This force was not only inadequate in numbers but in capacity for expansion Its distribution and organisation were more suited for holding internal India than to contend with an external foe The troops were distributed in Districts under generals whose commands were geographical in designation and in area Here were no complete Army Corps, Divisions, and Brigades ready to take the field In case of war the troops for the field army were to be drawn from all parts of India, the various units being sorted out into Brigades and Divisions on arrival at the base of operations, and provided with a scratch lot of generals and staff officers for the occasion

Army Re-distributed

It was in the reorganisation of the scattered and heterogeneous forces of the Indian Empire that Lord Kitchener's great work lay Some steps had already been taken towards the abolition of those Presidency distinctions which formerly divided the Indian native forces into three armies supplemented by a congeries of local forces But he found three armies, each confined to its own geographical limits, beyond which its units and its personnel did not ordinarily proceed, or when they did, they carried the chains which linked them to their respective Presidencies The units of the Indian Army were renumbered, a fruitful cause of confusion being thus eliminated, Presidency and local distinctions were abolished, and a homogeneous army, though composed of heterogeneous races, free to benefit by the experience of service in any part of India, was created The experience of 1857 proved the measure of safety provided by the presidential system of three armies with nothing in common between them, but the new regime considered that the conditions of fighting were obsolete, and had been entirely changed by increased facilities and rapidity of communication throughout the Empire.

The whole army was formed into nine Divisions, exclusive of the Burma Division, each with its proper complement of the three arms, under its General with staff complete These Divisions were organised for war, each one could take the field intact, leaving behind sufficient troops for the maintenance of internal order Arrangements were made for the organisation of supply and transport The reserve was not sufficiently large to supply the vastage of war, it was expanded, the infantry reserves being augmented, while the cavalry was included in the system Small isolated and isolated stations were by degrees abandoned, the Divisions, or at least the Brigades, being assembled with a due regard to strategic requirements and to the necessities of training, though some are extended over a

wide area of country The nine divisions were distributed between two armies, each with its Commander (their heads resting on the main routes of Quetta and Peshawar

The Military Supply Department, with its Member on the Governor General's Council, was abolished in due course, an Army Department was created, to deal with much of the business carried on by its predecessors, with a Secretary in Charge The Commander-in-Chief is now the only Military Member of Council, and it is a question whether he has not a burthen greater than one man can bear The recommendations of Lord Roberts' Committee have been ignored, for that Committee recorded the opinion that "the concentration of the whole responsibility of supply of the Army under one head, if that had to be to all modern principles in regard to armies" It was feared that the system now obtaining would lead to the diversion of too large a portion of the time of the Commander-in-Chief from his natural military duties, and it certainly appears that the functions and status of that high officer have largely altered

Indian regiments are numbered consecutively, the infantry from 1 to 130, the cavalry from 1 to 30 They have subsidiary titles based upon their composition, their territorial origin, or the names of distinguished officers with whom they were connected

British troops are periodically relieved from England and the Colonies, regiments ordinarily being some fifteen years in India where they are kept on a war-footing by drafts sent from the regimental depots Native troops consist of every warlike class, a great variety of races being found in the ranks Gurkhas and Sikhs to a great extent, are organised in class regiments There are Rajputs of both Mahatras, Patthans, Baluchis and Hazaras, Marathas, Rajputs, Jats, Dogras, and old Bombay Army, Mahomedans from the south of India and from Hindustan are found in the ranks of many corps, and most of the Frontier tribes furnish their quotas

The native officers generally rise from the ranks, but some are given direct commissions, although this system has not been largely adopted The volunteers form a valuable and efficient body of men, who would be most useful in emergency, having a good knowledge of the use of arms and furnishing some of the best shots in the country

The Military Police is largely composed of warlike races, especially in Burma, which is mainly garrisoned by these corps, while in Central India the aboriginal Bhils and em-loyment in the ranks These, however, though a useful auxiliary, do not form part of the Army, and serve under the orders of the Civil Government

The Divisions of the Army are distributed as follows, their headquarters being at the Stations indicated.

1st Division	Headquarters-Murree
2nd	Peshawar
3rd	Rawal Pindi
4th	Lahore
5th	Alcant
6th	Lucknow

cavalry and 60 companies of infantry. Doors districts of Punjab. The ruling Chief of Kashmir is of this caste, of which are 11 squadrons and 66 companies in the army. British are got now largely enlisted, while the Maharattas, famous as predatory horse in the historic past, now compose 57 companies of infantry. They are chiefly recruited in the Dekkan and the Konkan. Nor must we forget the Hill Rajputs of Garhwal, good and gallant soldiers, who supply two battalions, and the low caste men of Madras so efficient as pioneers and sappers. Some 9,000 Madrasas are still in the ranks.

Improvements in Conditions

Many improvements have been made in the pay of the soldier and the conditions of service. They are thus summarised in the Report on the Moral and Material Progress of India for the decade 1901-02 to 1911-12. The decade began with an increase of the pay of British troops due to the adoption in India of the proposals of the Home Government for an increase of 2d a day from the 1st April 1902. This involved an additional charge on Indian revenues of some £225,000 a year. In April 1904 a further increase of from 4d to 7d a day was given in the form of service pay. The whole of the service pay issued in India was in accordance with the decision of the Lord Chief Justice, acting as arbitrator between the Imperial and Indian Governments, borne by the latter, the extra charge being thus raised to about £700,000 a year. From the 1st January 1909, in accordance with the intention announced in the Proclamation of the King Emperor on the fifteenth anniversary of the transfer of Government to the Crown, a general increase of pay for all ranks was granted to the Indian Army, and arrangements were made for the free supply of fuel by Government at a cost of £27,000 a year. The increase was Rs 3 a month for non-commissioned officers and men of the hillard cavalry and Rs 2 for other troops. Other measures that may be noticed were the raising of the limit of money granted on enlistment and the introduction of a good allowance, the grant of free passage to all ranks, when on the march or at manoeuvres and of free passages by rail (within certain limits) for men called home on urgent private affairs—all introduced in 1906, the revision and improvement of the pension rules of the Native Army, and the abolition of the punishment of flogging in time of peace, except for offences for which that punishment is permissible in civil life, in 1907-08, and a revision of the rates of pay of captains and subalterns of the Indian Army, and of regimental salaries, involving a considerable addition to the emoluments of the junior grades in 1908. Since 1910 considerably of the improvement for the native troops

It had become obvious that this improvement was a matter of urgency in many cases, and with the persistent rise in prices and wages comfortable surroundings could not be maintained without a considerable increase of expenditure. In the new lines, a sound type of construction has been adopted, and the work has been entrusted to the Military Reserve of Officers—for some years there has been continued what was called The Indian Army Reserve dates from 1886 Under existing arrangements, it consists of men with not less than three years' colour service. Men passing into the Reserve still belong to their respective regiments, and come up for two months' training once in two years. In 1901 when the strength of the Reserve was about 21,500 men, it was decided to raise it gradually to 50,000 men, reducing the reserve from 12 to 12 1/2 a month, and also to form an Indian cavalry reserve by extending the system to hillard cavalry regiments. Reserves obtain a pension after 25 years' total service. There is a body of reserve officers whose numbers were largely increased soon after the outbreak of the war.

Reserves.

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Reserve of Officers—For some years there has been continued what was called The Indian Army Reserve dates from 1886 Under existing arrangements, it consists of men with not less than three years' colour service. Men passing into the Reserve still belong to their respective regiments, and come up for two months' training once in two years. In 1901 when the strength of the Reserve was about 21,500 men, it was decided to raise it gradually to 50,000 men, reducing the reserve from 12 to 12 1/2 a month, and also to form an Indian cavalry reserve by extending the system to hillard cavalry regiments. Reserves obtain a pension after 25 years' total service. There is a body of reserve officers whose numbers were largely increased soon after the outbreak of the war.

rather than to train up an effective reserve with Indian troops, in order to meet casualties, This policy tested by the war was found wanting. The casualties amongst the British officers with the Indian regiments were very large indeed, these regiments lost their initiative when deprived of the officers on whom they had been taught to rely, and it was impossible to make the great gaps good from the ordinary officer class, because of their lack of knowledge of the Indian languages and Indian conditions. An appeal for recruits for the Indian Army Reserve of Officers met with a very ready response. The first contingents reached the large proportion of whom were drawn from the Volunteer Officers, or from the ranks of special corps like the Light Horse, who are ordinarily recruited from the officer class. The officers selected were put through a rapid course with British and Indian regiments, and when efficient enough to serve with the Indian regiments at the front. They have done excellent service, and have suffered many casualties, indeed without this reinforcement of officers especially acquainted with Indian conditions the efficiency of the Indian Regiments could not have been maintained. It is understood that the numbers are now being raised to two thousand.

The Government of India sanctioned the establishment of an India Central Flying School, at Simsburi, with a view to the work of the school during the war. The object of this school is to train officers of the Indian Army in flying. The school is under the command of the Commander-in-Chief, India, and is situated at Simsburi, near Calcutta. The school is open to all Indian Army officers who are qualified for the rank of Captain, and who have completed three years' service in the Indian Army. The school is open to all Indian Army officers who are qualified for the rank of Captain, and who have completed three years' service in the Indian Army. The school is open to all Indian Army officers who are qualified for the rank of Captain, and who have completed three years' service in the Indian Army.

MILITARY FLYING SCHOOL.

The Imperial Cadet Corps was founded in 1901 for the purpose of training young men in military discipline and drill. The Corps consists of about 20 young men of noble birth who have been educated at the Civil College. The Corps is under the command of the Commander-in-Chief, India, and is situated at Simsburi, near Calcutta. The Corps is open to all Indian Army officers who are qualified for the rank of Captain, and who have completed three years' service in the Indian Army.

The Imperial Cadet Corps.

The volunteers of India may be classes under the Imperial Flying School. The volunteers of India may be classes under the Imperial Flying School. The volunteers of India may be classes under the Imperial Flying School. The volunteers of India may be classes under the Imperial Flying School. The volunteers of India may be classes under the Imperial Flying School.

Volunteers.

The Imperial Service Troops

Military Flying School

[illegible]

1914		1913	
Enrolled strength	41,025	41,083	
Officers	39,240	37,830	
Reservists	2,035	3,178	
The net expenditure on the army (exclusive of Military Works and Special Defence Works) in 1913-14 as compared with that in 1912-13 was as follows —			
1913-14		1912-13	
£		£	
Effective charges	15,462,240	15,231,375	
Non effective charges	3,128,493	3,117,348	
	<u>18,590,733</u>		<u>18,348,723</u>
Total		Total	

The stationed establishment of the Native army reserve was 36,046 and its actual strength on 1st April 1914 was 34,295, as against 33,712 on 1st April 1913

The number of Volunteers in the whole of India on 1st April was as under —

	1913	1914
Enrolled strength	41,083	41,025
Efficients	33,830	39,240
Reservists	3,178	2,955

The net expenditure on the army (exclusive of Military Works and Special Defence Works) in 1913-14 as compared with that in 1912-13 was as follows —

In 1913-14 seven battalions of Indian infantry and one battery of Indian artillery were employed in the colonies and in China. One mountain battery of Royal Garrison artillery was employed in Egypt. There was an Indian contingent in Somaliland, and detachments of infantry and cavalry were employed in Persia.

Actual Strength	Sanctioned Establishment
5,001	5,017
73,155	73,323
150,574	160,313
9	9
23,077	21,468
251,816	263,128
251,761	263,555

The sanctioned establishment of the army in India for 1913-14 and its actual strength on 1st April 1914 were as follows —

• STRENGTH OF THE ARMY.

Staff of the school—The staff of the Indian Central Flying School normally consist of—1 Commandant at Rs 1,200 per mensem and 3 flying officers at Rs 800 each per mensem.

EXPENDITURE ON THE MILITARY SERVICES

On the 31st March 1915 the Royal Indian Marine consisted of three troopships and six other sea going vessels, three inland vessels, three flats, and a number of small steamers, launches, &c. There was an establishment of 10 executive officers, 83 engineer officers, 12 assistant surgeons, and 12 assistant medical officers of the Indian Subordinate Medical Department, and the native crews of the vessels (seamen, artificers, and others) numbered, in all, about 2,220 men.

Ant-enteric inoculation is making progress among Gurkhas. A high mortality, especially among Gurkhas, among Indian troops, over 13,000 having been inoculated.

Marine—The net expenditure on marine services amounted to £366,500 in 1914-15, as against £423,333 in 1913-14. In this amount are included the cost of the Royal Indian Marine and the contribution towards the expenses of His Majesty's ships employed in the Indian seas.

1915-1916 Budget	1914-1915 Revised	Accounts, 1914-1915	Accounts, 1912-1913	Accounts, 1911-1912
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Expenditure				
INDIA—				
Effective Services—				
Administration	69,23,994	69,75,270	71,56,430	63,44,000
Military Accounts	29,15,540	29,15,887	30,14,241	28,00,000
Supply and Transport	12,45,05,223	12,20,03,251	12,23,80,011	10,56,00,000
Veterinary	4,93,507	5,00,023	5,02,617	4,07,000
Clothing	12,58,800	15,68,921	19,24,690	34,72,000
Remounts	47,13,862	49,28,434	46,92,456	54,53,000
Medical Services	57,83,758	56,06,220	57,50,474	53,19,000
Medical Stores	5,05,770	5,08,157	5,51,826	5,21,000
Ordnance	88,17,906	98,54,097	93,87,161	1,06,43,000
Ecdesiastical	4,17,979	4,30,154	4,27,183	4,43,000
Education	12,52,272	12,41,097	13,17,675	10,40,000
Compensation for food, etc.	48,96,685	57,56,698	62,81,040	57,10,000
Miscellaneous Services	89,22,432	31,25,192	28,42,035	3,11,29,001
Hunting	3,04,955	6,98,816	2,10,975	2,00,000
Conveyance by road, river and sea	8,74,856	15,93,814	8,47,034	7,99,000
Conveyance by rail	43,35,239	38,62,887	42,43,200	43,43,000
Undadjusted Expenditure	—1,52,782	—6,79,193	1,29,023	16,09,000
TOTAL RS				
20,84,03,972	20,62,37,829	20,85,59,916	22,02,81,000	22,19,18,000
Non effective Services—				
1,04,85,675	1,07,43,291	1,09,57,429	1,10,41,000	1,55,87,000
TOTAL INDIA RS				
21,88,89,647	21,69,81,120	21,95,17,345	23,13,22,000	23,75,05,000
Equivalent in sterling £				
14,592,643	14,465,408	14,634,400	15,421,400	15,833,600

	1911-1912.	1912-1913.	Accounts, 1913-14.	1914-1915.	1915-1916 Budget
ENGLAND— <i>Effective Services—</i>	Office for British Forces Furlough allowances etc., of British offices Consolidated Clothing Allowances of Bri- tish soldiers Furlough allowances, Indian Service Indian Troop Service Other heads	Clothing Stores Ordnance and Miscel- laneous Stores Medical Stores Stores Military Farms Stores Operations in Persian Gulf (Stores) Stores taken to India with Troops	2,430,304	2,359,430	2,078,876
Non effective Services—	Payments to War Office for British forces Pensions, Indian Service Other heads	808,331 1,431,735 174,473	919,183 1,425,242 177,203	927,029 1,407,506 181,248	946,000 1,375,000 203,000
TOTAL	£	£	£	£	£
TOTAL ENGLAND	£	£	£	£	£
TOTAL EXPENDITURE	£	£	£	£	£
RECEIPTS	Rs	Rs	Rs	Rs	Rs
India	Rs	Rs	Rs	Rs	Rs
Equivalent in sterling £	£	£	£	£	£
TOTAL RECEIPTS	£	£	£	£	£
TOTAL NET EXPENDITURE £	£	£	£	£	£

ESTABLISHED STRENGTH OF BRITISH AND INDIAN ARMIES IN BRITISH INDIA
(exclusive of Indian Artillery and Followers) for the year 1914-15.

CORPS	Northern Army		Southern Army		Total	
	Warrant & Non-Commissioned Officers & Privates	Commissioned Officers	Warrant & Non-Commissioned Officers & Privates	Total	Commissioned Officers	Warrant & Non-Commissioned Officers & Privates
BRITISH ARMY						
Royal Artillery	202	7,681	287	7,509	7,706	579
Cavalry	102	3,594	81	1,797	1,878	243
Royal Engineers	204	9	105	6	111	306
Infantry	784	28,104	24,126	24,798	1,456	52,290
Intelligence & Veterinary Establishment						
Indian Army	71		30		30	101
General List, Indian Army						
General Officers	1				1	
unemployed						
Total, British Army	1,514	39,448	1,175	33,438	34,613	2,689
						72,886
						75,575

CORPS	British		Indian		Total, Indian Army	
	Officers	Warrant and N-C O	Officers	Warrant and N-C O	Officers	Warrant and N-C O
INDIAN ARMY						
Artillery	57	6,440	11	1,440	68	10,043
Body-Guards	4	280	4	280	8	422
Cavalry	375	15,440	211	8,810	583	24,250
Sappers & Miners	34	1,071	53	3,183	87	5,154
Infantry	1,095	65,688	930	54,304	2,025	119,992
Total, Indian Army	1,502	89,819	1,209	70,042	2,711	159,861
Imperial Service Troops						
Artillery		9,077		11,092		21,069
Sappers & Miners		1,963		565		1,928
Infantry		19,380		11,836		31,216
Volunteers—Efficients	818	17,799	781	20,122	1,549	37,021
Reservists	19	1,521	12	1,533	31	3,054

THE EAST INDIES SQUADRON.

Commander-in-Chief (Flagant) Captain, C. H. Maxwell Telford
 Dartmouth, cruiser, 5,250 tons Captain, Judge D'Arcy
 Roy, cruiser, 4,050 tons. Captain, F. W. Cuvillid
 Alert, sloop, 960 tons Lieut A Johnstone
 Espley, sloop, 1,070 tons Commander, W. Nun
 Odlin, sloop, 1,070 tons Commander, C. R. Watson

Contributions to the Navy

A cock and bull story, to the effect that the Native Chiefs of India were going to present three super-lordships and nine first class cruisers to the Imperial Navy, was started in November 1912, and directed public attention to the question whether India was paying an adequate amount for the services rendered by the Navy. "Even the Naval Annual (1913 edition) took part in the agitation for an increased contribution by India. It says— "Amount has been persistent regarding the attitude of India towards the Navy. Some exaggerated statements were published during the year, but nothing definite has been done. This is the more surprising when it is remembered that, although the sea-borne commerce of India totals 115 millions sterling, the annual contribution to the Navy is only £100,000 out of a total revenue of 82 millions sterling. It is true that very heavy expenditures are involved in the military forces of India, but the commerce, coast protection, and transporting of troops is dependent upon Britain's sea power. There is a prospect that India will voluntarily follow the example of the self-governing Dominions."

The proportion of contributions from the overseas Dominions towards naval expenditure is shown in the following table issued with the last Navy Estimates that gave details—

Received from	Nature of Service	Total
India	Maintenance of His Majesty's Ships in Indian Waters (on account of work performed by the Admiralty)	100,000
Australian Commonwealth	Indian Troop Service	3,400
	Repayment on account of services rendered by His Majesty's Ships engaged in the suppression of the Arms Traffic in the Persian Gulf	64,000
Australia, Canada, Wealth Dominion of	Contributions on account of liability for Retired Pay of Officers and Pensions of Men lent from the Royal Navy	10,800
	Survey of the N W Coast of Australia	7,500
Dominion of New Zealand	Maintenance of an Australian Squadron and of a branch of the Royal Navy Reserve	41,600
	Maintenance of an Australian Squadron and of the Imperial Navy generally, (also of a branch of the Royal Naval Reserve	100,000
Union of South Africa	General maintenance of the Navy	85,000
Newfoundland	Maintenance of a branch of the Royal Naval Reserve	3,000

[illegible]

2,225 Recruited from the Ratnagiri District of the Bombay Presidency

Troops: R I M S Duffin * 6315 tons 10,191 Horse Power

"	"	9,300	2,240	"	"	"	"
"	"	7,240	1,508	"	"	"	"
"	"	753	401	"	"	"	"
Persian G	"	2,202	1,324	"	"	"	"
Aden	"	2,157	1,125	"	"	"	"
Hanqoon	"	1,277	903	"	"	"	"
Persian G	"	2,025	960	"	"	"	"
Persian Gulf	"	1,500	1,014	"	"	"	"
	"	1486	209	"	"	"	"
Baghdad	"	190	182	"	"	"	"
"	"	250	172	"	"	"	"
Burma,	"	360	270	"	"	"	"
"	"			"	"	"	"
"	"			"	"	"	"

* On Special Service

In addition to the above are 30 launches composed of special service launches, target, towing tugs, powder boats, military service launches, etc

There are two Royal Indian Marine Dockyards at Bombay and at Calcutta, the former being the more important. There are 5 graving docks and a wet basin at Bombay, together with facilities which enables the whole of the repairs for the ships of the East India Squadron of the Royal Navy and for the ships of the Royal Indian Marine and local Governments to be carried out, and tugs, lightships, pilot schooners, launches, etc., constructed.

PRINCIPAL OFFICERS, BOMBAY DOCK YARD

R I M Officers.

Staff Officer, Command W. Ramsay, R I M Inspector of Machinery, Chief Engineer T. H. Knight, R I M.

CIVILIAN OFFICERS.
Chief Constructor, Mr T Avey
Constructor, Mr D H North
 PRINCIPAL OFFICERS, CALCUTTA DOCKYARD
R I M Officers
Staff Officer, Commander H Morland, R I N
Inspector of Machinery, Chief Engineer
T Lash, R I N
 CIVIL OFFICERS
Constructor, Mr G P Newbham
 In addition to the regular appointments in the ships of the Royal Indian Marine, and in the R I M Dockyards, the following appointments under local Governments are held by officers in the Royal Indian Marine —

The Nicholson Committee.

Port Officer, Akayab, Moulemein and Bassau,
Marine Transport Officer, Mandalay, and Super-
intending Engineer, Mandalay

President of the Port
Chittagong
Port Officer, and Engineer and Shipwright
Surveyor
Aden—Port Officer
Karachi—Port Officer
Port Blair.—Engineer and Harbour Master

Expenditure.

Recent expenditure on the Royal Indian Marine under all heads has been —

1913-14 1914-15

1913-1914 3 123,303
1914-1915 7 366,500
1915-1916 (Estimated) 7 582,200

Against this were receipts, from Dockyards, for vessels, stores, etc, which amounted in 1913-14 to £ 89, the actual cost to the State for the whole service was —

The Earl of Crewe (Secretary of State for India) announced in the House of Lords on November 2, 1911, that the Government of India was conducting an inquiry into the various departments, with the view of seeing what economies might be effected, and in that operation the Department of the Army was properly included, but there would be no sacrifice of the safety, or of India or any risk in maintaining order. They had been asked by the Government that they should be assisted in making an inquiry into the whole military position by a Committee over which Field-Marshal Sir W. Nicholson would preside.

The Committee met in Simla in May 1912, consisting of—*X* Sir W (afterwards Lord) Nicholson, Lt General Sir Percy Lake, Chief of the General Staff in India, Lt Gen Sir Robert Scallan, Indian Army, and Sir William Meyer (now Finance Member of Council). The Committee were instructed by their terms of reference—First, to carry out a comprehensive survey of the various circumstances requiring the use of Military Force which may arise out of the external or internal situation in India under the conditions which now exist or may probably arise during the next few years. Secondly, the conclusions of the Committee is desirable, action on the conclusions would not be published. Any action on the report would not be published.

In the Imperial Legislative Council on January 14th, 1914, it was officially stated that the draft a minority report." During a discussion made by their colleagues, and will doubtless strong exception to many of the proposals Robert Scallan are credited with having taken a casting vote. But Sir Percy Lake and Sir Marshal was given the invaluable advantage of joint report, because the distinguished Field-Marshal what must be called by courtesy a majority report, because the distinguished Field-Marshal was given the invaluable advantage of joint report, because the distinguished Field-Marshal was given the invaluable advantage of joint report, because the distinguished Field-

Lord Nicholson and Sir William Meyer have opinion has been placed before the Committee held in accordance during the War

Indian Finance.

The Indian Budget statement for the year 1913-14 was awaited with absorbing interest for this was the first time for an official gene-

ration when Indian Finance had been affected by the shock of war, the previous occasion being after the Afghan War of 1877-78, when a great-

ous misallocation was made as to the cost of the operations. It is true that India, save

Emden on the merchant shipping, at the mouth of the Hugel II and at the approaches to

Ceylon, did not wholly feel the impact of the war. But the whole cost of India in

development has been on the lines of diminishing the money in markets of London and the

world. She is not yet in a position to

partly is increasing her foreign trade, and this trade

is with the whole world, and in reports largely

with the continent of Europe. It was in 1911

table that almost every branch of Indian Finance

should be affected by the war. Then in the

Indian financial year does not close until the

end of March, the financial statement im-

Now the effect of the war may be summarized in

a few words. Despite the inevitable dislocation,

the Government was able to provide for a

judicious scale of expenditure, a moderate pro-

gramme of capital works, and to avoid ill in-

crease in taxation. This was done by slightly

increasing the borrowing programme

Financial Strength.—Fortunately, the war

round Indian finances in an exceptionally strong

position. The Treasury balance, in India and

in England, were a million and a half sterling

in advance of the estimate, which is of

core loan raised in India had been a great suc-

The actual gold holding

of the Government of India was £23½ millions

The Presidency Banks were unusually well pro-

vide with funds. The only adverse condition

was an unusually large stock of pie goods, one

for the main heads of import, for shadowing a

period of depression in this important branch

of trade. On the whole it may be said that

never were the economic and financial condi-

tions in the country stronger

Effects of the War.—The first effects

of the war were a threatened break in exchange

The financial condition in India (see Currency)

make exchange sensitive, because of the large

obligations—approximately £18½ millions annu-

ally—which has to meet in London. The

exchange value of the rupee is maintained

through the sale of what are called Reverse

Councils, or sterling bills on London Govern-

ment annuities, or sterling effect on the situation,

used a transmuting effect on the situation,

million sterling weekly, and this at once over-

bills to the value of £83½ millions were sold during

the year. The next step was to husband the

stock of gold. As sovereigns went to a premium

speculators rushed to exchange their rupees and

currency notes, and £18½ millions were taken

before Government stepped in and refused to

issue gold altogether to private persons. Then

there was a rush by the people to withdraw

their savings Banks deposits and to exchange

currency notes for coin. Every facility was

offered to both and the rush was stayed before

It had produced embarrassing results. The

total withdrawals from the Post Office Savings

Banks amounted to 57 millions as these

deposits represented untimely debt they had to

be met out of current balance, and for this

purpose Government borrowed heavily from

the Gold Standard Reserve (gr). The rush

to exchange currency notes for coin was much

shorter, and it was stimulated mainly by the wise

policy of the Government in materially adding

to the facilities for coinage. It was strong-

ly in the so-called Province which had been most

seriously shaken by the ill effects of the mushroom

growth, and in Burma. The net not circula-

tion was reduced by seven crores of rupees

(£13 millions). First-class securities showed

an upward trend only three and a half rupees

from the very high level it reached prior to the

outbreak of the war. Indian obligations in

London were met without difficulty, owing to

the fact that the Government of India had to

meet large obligations for the Home Govern-

ment in India, thus avoiding the necessity for

transfers, either on military account. The

balance in the India account stood at between five and

six per cent, and there was no shortage of money

for those who sold credit. The internal trade

was dislocated owing to the timidity of the

Merchants, who are the chief middlemen, and

many of whom fled to their homes in Rajpu-

tana, and the export trade by the cessation of

the greater part of the continental demand for

great staples like jute, cotton and oilseeds.

These are fully considered under Trade. But

the total disturbance was far less than anyone

had dared to hope. No moratorium was pro-

claimed, and India met all its demands from her

special conditions we can proceed to consider

the actual budget statement, but for its full

understanding it is necessary to indicate the

general principles which give a special

character to Indian finance

Financial Characteristics.—Three import-

ant factors have to be borne in mind in con-

sidering the finances of India. The first is

that the Budget of the Government of India

includes also the transactions of the Local

Governments, and that the revenues employed

by the latter are mainly derived from sources

which they share with the Central Govern-

ment. The principles underlying the relations

of the supreme with the local governments are

explained in the chapter dealing with this ques-

tion. Generally speaking, certain heads of

revenue are divided equally between the pro-

vinces and the Imperial Government, and cer-

tain heads are enjoyed entirely by the local

Governments. These vary with different pro-

vinces, but broadly it may be said that the divi-

ded heads are land revenue, excise, stamps,

income-tax and the in-comings from the large

irrigation works. The Provincial Govern-

ments take the whole of the receipts under

forests and registration, and the income of the

Budget Estimates for 1915-16

The influence of provincial finance on the Imperial Budget is clearly set out in the following table—

Revenue	Expenditure	Deficit (—)	Budget, 1914-15		
			Imperial	Provincial	Total
19,927	52,000	—2,712	30,220	72,446	80,156
			—2,217	—4,959	

Revenue	Expenditure	Deficit (—)	Budget, 1915-1916		
			Imperial	Provincial	Total
19,655	52,427	—2,770	31,755	84,180	80,347
			—1,065	—3,835	

Budget Features—Every Indian budget is based on the expectation of a normal monsoon.

But very few Indian monsoons are normal, consequently the story of Indian finance is one of alternate surpluses and deficits. Close estimates being impossible, cautious estimates of revenue must be made. Again, it is no uncommon experience to find that the spending departments are not able to spend up to their estimates, owing to the delay in obtaining material from England, shortage of labour, or the necessity of maturing plans before work can be launched. Although the increased resourcefulness of the people, owing to the extension of industry and the large sums of money that have flowed into the country owing to the high prices of export crops, has introduced a steady force into finance, budgeting is still largely what an ex-Finance Member described it, "a gamble in rain."

The Budget placed the total revenue for the year at £80 347 millions, as compared with £ 80 156 in the previous year. Of this the Imperial share was £49 655 millions as against £49 927. The principal decreases in revenue were under Customs, Salt and Railways. Under Customs (£37,000) because of the general decline in trade, and the cessation of most of the continental trade, induced by the war, under Salt (£25,000) because of the large payments of duty made on the eve of the expiry of the financial year in anticipation of an increase of duty, and under Railways (£260,000) because of the general decline in trade. Against this it was estimated that there would be an increase in the Imperial share of the Land Revenue of £428,000, and under Opium, consequent on improved prices, of £242,000. The Provincial Revenues were placed at £103,000 higher, almost entirely under the head of Land Revenue.

The expenditure was estimated at £80 347 millions as against £ 80 156, or this £49 655 millions was Imperial as compared with £49 927. There was an estimated saving of £244,000 under Military Services, as all save the most urgent repairs were postponed until the end of the war, and of £127,000 under Imperial Civil Works. On the other hand there was an increase of £520,000 to meet the interest charges on the borrowing programme which will be set out later.

The Provincial Expenditure was estimated at £31 755 millions, or £601,000 less than in the previous year and £2 205 millions below the figure for the year before that. The reason for this very large discrepancy will be apparent from what has gone before, where it was explained that the Imperial Government have made large grants from their opium and other surpluses to the Local Governments for expenditure on Education and Sanitation. These have not been fully utilised, owing to the necessity or preparing programmes and plans, and large sums are held to the credit of the Local Governments in the Imperial Balances. In the special circumstances of the war the Imperial Government might have put an embargo on all expenditure under this head, but realising that this would mean an interruption of schemes already commenced, with consequent waste and hardship, a compromise was struck. The Provincial Governments reduced their estimates by £1 670 million and the Imperial Government allowed them to draw on their accumulated balances to the extent of £1 million. On March 31st, 1916, it is estimated that the Provincial Balances will amount to £7 millions.

Education and Sanitation. In the Chapter on Finance in the Indian Year Book for 1915 (p. 163) figures were given showing the remarkable progress made in education, medical relief, and sanitation since the year 1911-12, when the Government of India began to give grants towards their purposes for these

These figures show that the expenditure under Education and Medical had practically doubled and that under the head of Civil Works there had been an increase of 47 per cent. While there must of necessity be some slackening in the pace during the years of war, the magnitude of the Imperial contribution for this purpose is apparent from the following table—

[In thousands of £]

Total Grants expected to be incurred during (1911-12 to 1915-16)	Total Grants given (1911-12 to 1915-16)	Savings on recurring grants during foreign period (about April 1916)				
		Re-current	Non-re-current	Non-re-current	Non-re-current	Total
		763	9,166	2,078	1,088	14,095
		245	1,723	1,112	611	3,731
		58	33	53	5	149
		177	106	146	11	440
		1,345	1,416	1,416	279	4,456
		667	388	388	279	1,342
		1,008	7,330	5,213	2,123	15,674

—Savings on recurring grants during foreign period (about April 1916)
Total amount expected to be available from special grants on the 1st April 1916 2,318

Capital Account.—Reference has been made to the manner in which the financial statement of the Government of India is complicated by transactions on capital account—by provision for railways and irrigation, and place the transfer of the capital, for the new Delhi. It has been the practice in the past to finance these works in part from revenue surpluses and in part from borrowings in India and in London. Revenue surpluses have been drawn upon so largely for this purpose that there is really no unproductive debt in India, and the nominal figure of unproductive debt is only £12 millions (9 a Debt). The large balances accruing from the opium surpluses over and above the allotments made to the Local Government and the redemption of temporary debt, allow of the allocation of exceptionally large sums from balances to the avoidance of debt.

Increase of Debt.—These capital transactions assumed a special importance in the Budget for 1916-17, because the Government of India decided to meet all their requirements without an increase of taxation, but by temporary and permanent borrowing as **ways** and means formed the crux of the Budget, we give these salient passages from the Financial Statement in some detail—

“We have to find funds from which to meet the Imperial deficit of the coming year and the expenditure by Local Governments in excess of the revenue which they expect to raise in the same period. £1 million of debt, mainly in connection with the purchase of the Indian Midland Railway some years ago, is also due for its charge by way of prepayment too, we are assuming the possibility of a withdrawal of £1 million more of savings banks deposits during the coming year. This accounts as a liability against funded Debt. There remains the head of **Capital Outlay** under which

“The first of the resources on which we can draw as against these requirements is afforded by the large cash balances with which we shall close the current year. Owing to the loans taken from the Gold Standard Reserve, we expect these to stand on 31st March next at about £21 million. Ordinarily we regard our treasures in India and at home as having a close of £1 million which can be regarded as available towards meeting our liabilities generally and still leave a little margin over the normal closing balances. We shall also set aside from revenue

“The total of these liabilities comes to about £14 million. In addition we have to include, as pending obligations requiring to be dealt with in connection with the coming year’s financial programme, the discharge of the £7 million of India bills in the current year, and the repayment of our loan of the same amount from the Gold Standard Reserve. Our total obligations are thus raised to some £28½ million

“The next year’s grant to a working minimum we have made a very large reduction, confining the next year’s grant to a working minimum the next year’s grant to a working minimum we have made a very large reduction, confining the next year’s grant to a working minimum

ue, under the Finance Insurance Grant head, close or half a million for reduction, or avoidance of debt, thus raising our assets, to about £5 million. Even so, we are left, however, with some £9½ million still to find, and five also the £14 million of temporary debt still to consider. The question now is, how is this shortage to be dealt with?

No additional Taxation—"The first method of adding to our resources which would naturally suggest itself—one which, indeed, we have very seriously considered—is to follow the lead of the mother country and impose a special taxation. We do not propose on this occasion to raise any money by increased taxation. We should not hesitate to do so to meet a deficiency in revenue which promised to be of a more or less abiding character. But the present circumstances are altogether peculiar. We know India too has a very small unproductive debt, and, with trade conditions depressed, and the present abnormal rise in food prices in a large part of the country, we have come to the conclusion that we ought not to add to existing taxation unless it is absolutely necessary.

Borrowing Programme for 1915-16

"In the first place, we propose to continue the loan of £7 million from the Gold Standard Reserve and leave it still outstanding on the 31st March 1916. The Secretary of State also intends to renew in 1915-16 the £7 million of India bills which he has raised this year. This disposes of the temporary debt for the time being, but still leaves us the original £9½ million (4½ crores) of this amount in India. In addition to the funds which we thus find in India, it is the Secretary of State's intention to raise £6½ million by fresh borrowing in England, either direct or through the agency of companies working State lines.

"To sum up this examination of a complicated and difficult position, I may briefly state that we propose a reduced but still considerable Railways—This is a question which properly belongs to the railway heading (q v) but has much as since the disappearance of the profits from the opium trade with China the railway portfolio has come built largely in the budget, they the railway property of the Government of India for the past five years is indicated in the following table—

	1911-12	1912-13	1913-14	1914-15	1915-16
Capital at charge at end of each year	331,247	340,103	351,302	361,750	368,513
Net working profit from railways excluding interest charges	15,813	17,272	17,616	15,102	14,774
Percentage of net working profit to capital outlay	4.77	5.08	5.01	4.18	4.01
Net working profit from railways after meeting interest charges	3,788	4,803	4,790	1,914	1,179
Percentage to capital outlay of net profits after meeting interest charges	1.14	1.41	1.36	.53	.32

The disadvantage of the railway head is that it still further makes the chances of India dependent on the character of the monsoon. Railway profits entirely hinge on trade, and this hinges on the rainfall, whereas the opium surplus was largely independent of the character of the monsoon.

REPERENCES—The Indian Budget (*Gazette of India*), March 6th, 1915.

India and the Durbar (Finance), By Sir William Meyer Murray.

India, its administration and Progress (Macmillan), By Strachey.

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India, its administration and Progress (Macmillan), By Strachey.

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The above are set out in the following table

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by which the Land Revenue is determined is of the former, however, there are two kinds of *Ryotwari* holdings—those in which each individual occupant holds directly from Government, and those in which the land is held by village communities, the heads of the village being responsible for the payment of revenue on the whole village area. This is later system prevails in the North. In Madras, Bombay, Burma and Assam, *Ryotwari* tenure is on an individual basis, and the Government cuts into a separate agreement with every village community. The basis of assessment on all classes of holdings is now more favourable to the cultivator than it used to be. Formerly what was believed to be a fair average sum was levied on the anticipated yield of the land during the ensuing period of settlement. Now the actual yield at the time of assessment alone is considered, so that the cultivator gets the whole of the benefit of improvements in his holding subsequently brought about either by his own enterprise or by "unearned increment." The Government, however, may at a new settlement re-claim a holding so as to secure for itself a fair share in an increment that may have resulted from public works in the vicinity, such as canals and railways, or from a general improvement of values. But the principle that improvements effected by private enterprise shall be exempt from assessment is now accepted by the Government and provided for in definite rules.

Dissevered the system of *Temporary Settlements* is in operation. At intervals of thirty years, more or less, the land in a given district is subjected to a thorough economic survey, on the basis of the trigonometrical and topographic surveys carried out by the Survey Department of the Government of India. Each village area, wherever the *Temporary Settlement* is in vogue, has been carefully mapped, records of rights made and preserved. Under property-boundaries accurately delineated, and the *Permanent Settlement* in Bengal the duty of assessing the revenue of a district is entrusted to *Settlement Officers*, members of the Indian Civil Service specially designated for this work. The duties of a *Settlement Officer* are thus described in Strachey's *India* (revised edition, 1911).—"He has to determine the amount of the government demand and to make a record of all existing rights and responsibilities in the land. He has a staff of experienced subordinates, almost all of whom are natives of the country, and the settlement of the district assigned to him is a work which formerly required several years of constant work. The establishment of agricultural departments and other reforms have however led to much simplification of the settlement Officers' proceedings, and to much greater rapidity in the completion of the settlements. All the work of the settlement officer is liable to the supervision of superior officers, the assessments proposed by him require the sanction of the Government before they become finally binding, and his judicial decisions may be reviewed by the Civil Courts. It is the duty of the settlement officer to make a record of every right which may form the subject of future dispute, whether affecting the interests of the State or of the people. The intention is to alter nothing, but to maintain and place on record that which exists."

Temporary Settlements

Under the *Temporary Settlement* land tenures fall into two classes—*Permanent* and *Ryotwari*—the difference between the two in a fiscal sense is that in *Ryotwari* tenures the *Yat* or cultivator pays the land revenue direct, in *Zemindari* tenures the landowner pays the *Yat* or cultivator pays the land revenue. Broadly speaking, the difference between the two in a fiscal sense is that in *Ryotwari* tenures the *Yat* or cultivator pays the land revenue direct, in *Zemindari* tenures the landowner pays the *Yat* or cultivator pays the land revenue. Broadly speaking, the difference between the two in a fiscal sense is that in *Ryotwari* tenures the *Yat* or cultivator pays the land revenue direct, in *Zemindari* tenures the landowner pays the *Yat* or cultivator pays the land revenue.

The Two Tenures

The incidence of the revenue according to the nature of the settlement, the class of tenure, and the character and circumstances of the holding. Under the *Permanent Settlement* in Bengal Government derive rather less than £3,000,000 from a total rental estimated at £12,000,000. Under *Temporary Settlements*, 50 per cent of the rental in the case of *Zemindari* land may be regarded as virtually a maximum demand. In some parts the impost falls as low as 35 and even 25 per cent and only rarely is the proportion of one-half the rental exceeded. In regard to *Ryotwari* tenures it is impossible to give any figure that would be generally representative of the gross produce as the maximum Government share But one-fifth of the gross produce is the extreme limit, below which the incidence of the revenue charge varies greatly. About twelve years ago the Government of India were invited in an annually signed memorial to fix one-fifth of the gross produce as the maximum Government demand. In reply to this memorial and other representations the Government of India (Lord Curzon being Viceroy) issued a Resolution in defence of their Land Revenue Policy in it it was stated that "under the existing practice the Government is already taking much less in revenue than it is now invited to exact" and "the average rate is everywhere on the down grade." This Resolution, together with the statements of Provincial Governments on which it was based, was published as a volume. It is *Q*11 the authoritative exposition of the principles controlling the Land Revenue Policy of the Government of India. In a series of propositions claimed to be established by this Resolution the following points are noted—(1) In *Zemindari* tenures

Incidence of the Revenue

progressive redistribution is the key-note of the Government's policy, and the standard of 50 per cent. of the assets is more often departed from on the side of deficiency than excess, (2) in the same areas the State does not hesitate to interfere by legislation to protect the interests of the tenants against opposition at the hands of the landlords, (3) in *Ryotwari* tracts the policy of long term settlements is being extended, and the proceedings in connection with new settlements simplified and cheapened, (4) local taxation (of land) as a whole is neither immoderate nor burdensome, (5) the over-assessment is not, as alleged, a general or widespread source of poverty, and it cannot fairly be regarded as a contributory cause of famine. At the same time the Government laid down as principles for future guidance—(a) large enhancements of revenue, when they occur, to be imposed progressively and gradually, and not *per saltum*, (b) greater elasticity in revenue collection, suspensions and remissions being allowed according to seasonal variations and the circumstances of the people, (c) a more general resort to reduction of assessments in cases of local deterioration.

Protection of the Tenants

In regard to the second of the above propositions noted above, various Acts have been passed from time to time to protect the interests of tenants against landlords, and also to give greater security to the latter in possession of their holdings. The Oudh Tenancy Act of 1880 placed important checks on enhancement of rent and eviction, and in 1900 an Act was passed enabling a landlord to entail the whole or a portion of his estate, and to place it beyond the danger of alienation by his heirs. The Punjab Land Alienation Act, passed at the instance of Lord Curzon, embodied the principle that it is the duty of a Government which derives such considerable proportion of its revenue from the land, to interfere in the interests of the cultivating classes. This Act greatly restricted the credit of the cultivator by prohibiting the alienation of his land in payment of debt. It had the effect of arresting the process by which the Punjab peasantry were becoming the economic series of money-lenders. A good deal of legislation affecting land tenure has been passed from time to time in other provinces, and it has been called for more than once in Bengal, Governments

where under the Permanent Settlement (in the words of the Resolution quoted above), "so far from being generously treated by the Zemindars, the Bengal cultivator was rack-rented, impoverished, and oppressed."

While the Government thus interferes between landlord and tenant in the interests of the latter, its own attitude towards the cultivator is one of generosity. Mention has already been made of the great advantage to the agricultural classes generally of the elaborate systems of Land Survey and Records of rights carried out and maintained by Government in the Administration Report of Bombay for 1911-12, it is stated—"The Survey Department has cost the State from first to last many lakhs of rupees. But the outlay has been repaid over and over again. The extensions of cultivation which have occurred (by allowing cultivators to abandon unprofitable lands) have thus been profitable to the State no less than to the individual, whereas under a *Zemindari* or *Rindad* system the State would have gained nothing, however much cultivation had extended throughout the whole of 30 years' leases." On the other hand, the system is of advantage to the ryots in reducing settlement operations to a minimum of time and procedure. In the collection of revenue the Government consistently pursues a generous policy. In times of distress suspensions and remissions are freely granted after proper inquiry. The amount of gross revenue raised on the land is estimated in 1915-16 at ₹22,04,600 out of a total from all sources in the same year of ₹80,34,600. This compares very favourably with the ₹34,00,000 of land revenue recorded as having been raised annually from a smaller empire by Aurangzeb.

The literature of the subject is considerable. The following should be consulted by readers who require further information— "Land Revenue Policy of the Indian Government," 1902 (Superintendent of Government Printing), Baden Powell's "Land Systems of British India," Sir John Strachey's "India, its Administration and Progress, 1911," (Macmillan & Co.), M. Joseph Chatterjee's "Administrative Problems of British India" (Vallu- milian & Co, 1910), and the Annual Administrative Reports of the Respective Provincial Governments

EXCISE.

The Excise revenue in British India is derived from the manufacture and sale of intoxicating liquors, hemp drugs and opium. It is a commonplace amongst certain sections of temperance reformers to represent the traffic in intoxicating liquors as one result of British rule. There is, however, abundant evidence to show that in pre-British days the drinking of spirituous liquors was commonly practised and The forms of intoxicating liquor chiefly consumed are country spirit, fermented palm juice, beer made from grain, country brands of rum, brandy, etc., locally manufactured malt beer and imported wine, beer and spirits. Country spirit is the main source of revenue, except in the Madras Presidency, and yields about two-thirds of the total receipts from liquors. It is usually prepared by distillation from the Malhava flower, molasses and other forms of unrefined sugar, fermented palm juice and rice. The British inherited from the Native Administration either an uncontrolled Out-Still System or in some cases a crude Farming System and the first steps to bring these systems under control were the limitation of the number of shops in the area farmed, and the establishment of an improved Out-Still System under which the combined right of manufacture and sale at a special shop was annually granted. This course was a kind of control, but Government to impose on the liquor traffic as a vend lice. It did not

graduate the taxation accurately on the still-head duty principle not to insist upon a standard of purity or a fixed strength of liquor. Moreover for political and other reasons the extent of control could not at first be completely there were tribes of aborigines who regarded the privilege of making their own liquor in their private homes as a long established right, and who believed that liquor poured as this to their god should be such as had been made by their own hands. The introduction of any system amounting to those people had to be worked very cautiously. Gradually, as the Administration began to be consolidated, the numerous native pot-stills scattered all over the country under the crude arrangements then in force began to be collected into Central Government enclosures called Distilleries, thus enabling Government to perfect its control by narrowing the limits of supervision, and to regulate its taxation by imposing a direct still-head duty on every gallon issued from the Distillery. Under Distillery arrangements it has also been possible to regulate and supervise thoroughly the manufacture of liquor and its disposal subsequent to it, leaving the Distillery by means of a system of transport passes, established under supervision, improved distribution and vend arrangements.

Various Systems

The Out Still System may be taken to include all systems prior in order of development to the imposition of Still-head duty. Briefly stated the stages of development have been—First farms of large tracts, second farms of smaller areas, third farms of the combined right to manufacture and sell at particular places without any exclusive privilege over a definite area, fourth farms of similar right subject to control of means and times for distilling and the like. The Provincial Government have had to deal with the subject in so the order of development from the lower forms of systems to the higher has not been always everywhere identical in details. Yet Administration in most provinces of British India has progressed on uniform lines, the key-note lying in attempts, where it has not been possible to work with the fixed duty system and fixed duty systems with the object of securing that every gallon of spirit should bear a certain amount of taxation. The Out-Still System has in its turn been superseded by either the Free-supply system or the District Monopoly system. The Free-supply system is one of free competition among the licensed distillers in respect of manufacture. The right of vend is separately disposed of. The District Monopoly system on the other hand is one in which the combined monopoly of manufacture and sale in a district is leased to a farmer subject to a certain amount of minimum still-head duty revenue in the monopoly area being guaranteed to the State during the term of the lease.

The recommendations of the Indian Excise Committee of 1905-06 resulted in numerous reforms in British India, one of them being that the various systems have been or are gradually being superseded by the Contract Distillery System.

The average incidence of taxation per proof gallon of distillery spirit amounted in 1911-12 to Rs 5.2, Rs 3.9 was derived from still-head duty and Rs 0.10 from vend fees. The average consumption per 1000 of the population in distillery areas varies from 23 gallons in Eastern Bengal to 17 gallons in the Bombay Presidency. Proper (1910-11).

Sap of the date, palmyra, and cocoanut palms, called today, is used as a drink either fresh or after fermentation. In Madras and Bombay the revenue is obtained from a fixed fee on every tree from which it is intended to draw the liquor. In Bengal and Burma the sale of shop licenses is the sole form of taxation. Country brands of rum, and so-called brandies and whiskies, are distilled from grape juice, etc. The manufacture is carried out in private distilleries, has been established, mostly in the hills, for the manufacture of a light beer for European and Durban consumption. The uniform fee of 3 annas per gallon is levied all over India at the time of issue.

Foreign liquor is subject to an import duty at the tariff rates, the most important of which is Rs 9 6 per proof gallon on spirit and 3 annas per gallon on beer. It can only be sold under a license.

Drugs—The narcotic products of the hemp plant consumed in India fall under three main categories namely, ganja or the dry flowering tops of the cultivated female hemp plant, charas, or the resinous matter which forms an active drug when collected separately, and bhang, or the dried leaves of the hemp plant, whether male or female cultivated or uncultivated. The main features of the existing system are restricted cultivation under supervision, storage in bonded warehouses payment of a quantitative duty before issue, retail sale under licenses and restriction on private possession usually sold by auction.

Opium—Opium is consumed in all provinces in India. The drug is commonly taken in the form of pills but in some places, chiefly on social and ceremonial occasions, it is drunk dissolved in water. Opium smoking also prevails in the City of Bombay and other large towns. The general practice is to sell opium from the Government Treasury, or a Central Warehouse to licensed vendors. The right of retail to the public is sold by annual auction to one or several sanctioned shops.

The optimum revenue in 1915-16 is estimated at Rs 1,798,000, and the Excise revenue at Rs 790,300.

SALT.

The salt revenue was inherited by the British both for Bengal and Burma, is imported from Government salt mines contained in the Sambhar Lake in Rajputana, salt brine condensed on the borders of the lesser Rann of Cutch, and salt factories in Bombay, Madras and at the mouth of the Indus.

The salt mine contains an inexhaustible supply. They are worked in chambers excavated in salt strata, some of which are 250 feet long, 45 feet wide and 200 feet high. The Rajputana supply chiefly comes from the Sambhar Lake where brine is extracted and evaporated by solar heat. In the Rann of Cutch the brine is also evaporated by solar heat and the product is known as Baranara salt. In Bombay and Madras sea water is let into shallow pans on the sea-coast and evaporated by solar heat and the product sold throughout India. In Bengal the damp climate together with the large volume of fresh water from the Ganges and the Brahmaputra into the Bay of Bengal render the manufacture of sea salt difficult and the bulk of the supply.

Government from Native Agency, and the miscellaneous transit dues. These transit dues were abolished and the salt duty consolidated and raised. There are four great sources of supply rock salt from the salt range and in the Punjab and Rajputana the salt manufacture is under the control of the Northern India Salt Department, a branch of the Finance Department. In Madras and Bombay the salt throughout India, except from the Portuguese territories of Goa and Daman, on the frontiers of which patrol lines are established to prevent the smuggling of salt into British India.

From 1883-1893 the duty on salt was Rs 2-8 per hundred of 52 lbs. In 1903, it was reduced to Rs 2, in 1905 to Rs 1-8 and in 1907 to Re 1 at which figure it now stands. The successive reductions in duty have led to a largely increased consumption, the figures rising by 25 per cent in 1903-1904. To illustrate the growth of consumption in 1903-1904, with a tax of Rs 2-8-0 per hundred, the revenue was Rs 83 lakhs, for 1915-16 with a duty of Re 1, the estimated revenue is Rs 3,382,100.

CUSTOMS.

The Indian fiscal system consists of a moderate tariff for revenue purposes only. There is a general import duty of 5 per cent *ad valorem* on all goods imported by sea, with special conditions for textiles and a large free list. Export duties are levied only on rice, at the rate of three annas per hundred of 82 pounds. The export is principally from Burma. The import duties have varied from time to time according to the financial condition of the country. Before the Mutiny they were 5 per cent in the days of financial stringency which followed the wars raised to 10 and in some cases 20 per cent. In 1875 they were reduced to 5 per cent, but the opinions of Free Traders, and the agitation of Lancashire manufacturers who felt the competition of the Indian Mills, induced a movement which led to the abolition of all customs dues in 1882. The continued fall in exchange compelled the Government of India to look for fresh sources of revenue and in 1894 5 per cent duties were re-imposed on raw and cotton fabrics being excluded. Continued financial stringency brought imposed various expedients the demands of the scope of the tariff, embodied in the Act of 1886. This imposed a tax on all incomes derived from sources other than agriculture which were exempted. On incomes of 2,000 rupees and upwards it fell at the rate of five pices in the rupee, or about 8 to 10 in the pound, on incomes between 500 and 2,000 rupees at the rate of four pices in the rupee or about 5 in the pound. In March 1903 the minimum taxable income was raised from 500 to 1,000 rupees. The tax is paid by about 300,000 people, and although it is unpopular chiefly because it was nominally only temporary and because it falls most heavily on those with fixed incomes, there is no likelihood of its repeal. The yield of assessed taxes is estimated at (1914-15) £ 2,098,790.

Income Tax.

The income tax was first imposed in India in 1860, in order to meet the financial dislocation caused by the Mutiny. It was levied at the rate of four per cent or a little more than 9 d in the pound on all incomes of five hundred rupees and upwards. Many changes have from time to time been made in the system, and the present schedule was consolidated in the Act of 1886. This imposed a tax on all incomes derived from sources other than agriculture which were exempted. On incomes of 2,000 rupees and upwards it fell at the rate of five pices in the rupee, or about 8 to 10 in the pound, on incomes between 500 and 2,000 rupees at the rate of four pices in the rupee or about 5 in the pound. In March 1903 the minimum taxable income was raised from 500 to 1,000 rupees. The tax is paid by about 300,000 people, and although it is unpopular chiefly because it was nominally only temporary and because it falls most heavily on those with fixed incomes, there is no likelihood of its repeal. The yield of assessed taxes is estimated at (1914-15) £ 2,098,790.

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To understand the debt of India it must be remembered that the Government of India has always a "corroborator". The country still needs vast capital expenditure both on railways and irrigation, indeed the expenditure on railways is always a "corroborator". The whole of this money is spent on productive works. The Indian railway system now returns to the State, after paying all interest charges and certain annuities for the redemption of capital, a surplus which varies with the character of the season. The irrigation works return a profit of over five per cent. Whilst therefore India is a constant borrower, she borrows only for expenditure on productive works. Her finance is even more conservative than this, for in most years a sum is set apart from the revenue surplus for expenditure on capital works. Through the operation of this policy the unproductive debt of India has been reduced to negligible proportions. It has been estimated by competent financiers that if a fair balance sheet were struck the balance would be on the right side.

When the trading charter of the East India Company expired in 1835, the rupee debt was Rs. 332.95 millions. Fifteen years later, in 1850-51, the debt reached Rs. 453.36 millions, and it stood at almost exactly that sum in the year preceding the mutiny of 1857. That caused a large increase in the rupee debt, which stood at Rs. 635.55 millions in 1859-60, the year following the suppression of the revolt. The debt then gradually rose to Rs. 687.57 millions by 1874-75, and another large increase occurred in the succeeding decade, due to the operations in Afghanistan which followed the great famine of 1877-78 and to the military operations in Afghanistan which followed the famine. By 1883-84 the rupee debt rose to Rs. 931.25 millions. There was then a further increase to Rs. 980.4 millions in 1887-88, to Rs. 1,007.48 millions in 1888-89, and to Rs. 1,052.8 millions in 1893-94. A three per cent. loan was raised in July 1896, and the debt stood at Rs. 1,082.12 millions at the end of 1896-97 and increased to Rs. 1,191.99 millions in 1905-06, to Rs. 1,366.67 millions in 1909-10, and to Rs. 1,997.05 millions in 1911-12.

A four per cent. terminable loan of Rs. 44 crores (£ 3 millions) was issued in 1915. The present dimensions of the debt are given below under the head of "interest".

Sterling Debt

The interest-bearing sterling debt was very small until the mutiny year, but the increase

conversion of the 5 per cent loan By 1878-79 issued at 4 per cent and was redeemable in 1923 practically the whole debt bore interest at 4 and 4 per cent Rs 151.48 millions at 4, and Rs 613.33 millions at 4 per cent The 4 per cent loans were all converted to 4 per cent by 1893, save for a sum of Rs 10 millions, being a loan from the Maharaja Holkar on account of the Indore State Railway, which is not convertible until about 1970. In the same year a small loan of Rs 35.5 millions was raised at 3 per cent, and in the following year the bulk of the 4 per cent loans was converted to the rate of 3 per cent In 1896-97 a new loan of Rs 40 millions was raised at 3 per cent On the 4th July 1900 a loan of Rs 30 millions was raised at 3 per cent and this was followed by other loans, at the same rate of interest In 1915, in order to meet the higher price of money caused by the war the 4 per cent loan was converted to 5 per cent Rs 3,926,700 in India and £5,092,300 in England, a total of £10,019,000

The Budget of 1915-16 provided for an expenditure on interest of Rs 3,80,00,000 In 1915-16, is as follows—

	Rs.	4 per cent	3 per cent	3 per cent	5 per cent	Other debt	Temporary Loans	Savings Bank Balances
£ 152,637,257	3,07,00,000	1,42,64,84,400	8,17,52,000	1,00,71,390	11,00,00,000	21,32,14,898		

Absorption of Gold in India

(In lakhs of Rupees)

	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15
1 Net annual addition to the stock or the country	24.00	27.00	40.50	37.50	27.00	11.00
2 Progressive total of additions to the stock	2,16.00	2,43.00	2,83.50	3,21.00	3,48.00	3,59.00
3 Held in mints and Government Treasuries and Currency and Gold Standard Reserve	9.00	9.00	24.00	30.00	22.50	15.50
4 Net annual variation in item 3	9.00	15.00	6.00	—7.50	—7.00	—7.00
5 Net progressive absorption	2,07.00	2,34.00	2,59.50	2,91.00	3,25.50	3,43.50
6 Absorption of the year	15.00	27.00	25.50	31.50	34.50	18.00

Item 1 shows the amount of gold produced in India plus the net imports (i.e., imports minus exports) In 1914-15 the gold produced was Rs 3.51 lakhs plus net imports Rs 7.65 Rs 11.00 lakhs In round figures Item 2 shows the progressive total of the figures in item 1 to the end of each year Total at end of 1913-14 Rs 3,48.00 lakhs plus figure for 1914-15 Rs 11.00 lakhs=3,59.00 lakhs at the end of 1914-15 Item 3 shows the reserve held in India plus the amount of gold received into the mints in each year Item 4 shows the annual variation in the actual amount held in the mints and in the reserves in India Amount held in 1914-15 Rs 15.50 lakhs minus that held in 1913-14 Rs 22.50 lakhs is equal to—Rs 7.00 lakhs shown against this item in 1914-15 Item 5 shows the difference between item 2 (progressive total) and 3 (amounts held in the mints, etc) Rs 3,59.00 lakhs minus Rs 15.50 lakhs=Rs 3,43.50 lakhs during 1914-15 Item 6 shows the difference between two successive figures in item 5 Rs 3,43.50 lakhs minus Rs 3,25.50 lakhs (annual difference between item 1 and item 5) Rs 18.00 lakhs during 1914-15, or, in other words, the difference between item 1 (annual addition to the stock) and item 4 (net variation in item 3), Rs 11.00 lakhs minus (Rs 7.00 lakhs), i.e., Rs 1

AMOUNT OF THE RUPEE AND STRIKING DOLL—(contd.)

	Registered debt in India.	Registered debt in London	Interest payable.	Amount borrowed and paid off each year (Borrowed +, paid off—)		Proportion of the Registered Rupee debt held in London on 31st March
				In India	In England	
1881-82	88,05,31,620	68,181,047	3,06,13,280	2,708,108	2,00,11,100	22,05,60,650
1882-83	90,08,87,060	68,585,601	3,74,11,400	2,721,179	2,03,56,040	22,06,11,320
1883-84	93,10,1,810	68,108,837	3,84,01,110	2,701,207	2,60,26,180	22,08,75,180
1884-85	93,18,96,000	69,271,088	3,84,18,550	2,891,828	—77,240	21,83,08,570
1885-86	92,70,39,820	73,809,021	3,77,18,380	2,803,008	—47,00,780	20,71,23,580
1886-87	92,06,40,360	84,228,177	3,82,02,570	3,163,411	—5,01,460	19,74,05,570
1887-88	98,08,08,620	84,140,148	4,03,78,680	3,018,010	2,43,02,800	20,81,89,870
1888-89	1,00,87,07,420	95,033,010	4,13,73,130	3,230,474	2,78,08,870	21,71,40,680
1889-90	1,02,70,11,750	98,102,301	4,21,56,080	3,327,448	1,88,11,330	21,50,40,460
1890-91	1,02,74,66,550	103,408,208	4,17,61,110	3,624,376	—1,40,200	20,73,12,050
1891-92	1,02,60,23,170	104,404,143	4,17,16,000	3,602,440	—5,12,380	27,50,58,410
1892-93	1,02,93,76,520	106,083,707	4,12,77,700	3,570,082	2,45,2,350	26,09,38,610
1893-94	1,05,54,00,780	114,113,702	4,20,92,000	3,687,080	2,60,85,200	24,00,55,410
1894-95	1,04,37,37,400	110,005,820	3,61,00,140	3,625,323	—1,17,21,380	23,02,60,600
1895-96	1,03,78,89,280	115,303,732	3,64,00,740	3,007,832	—58,48,120	25,35,07,620
1896-97	1,09,11,50,530	114,883,233	3,78,43,760	3,813,208	45,37,01,250	24,00,06,020
1897-98	1,11,60,56,340	123,274,680	3,87,11,000	3,940,770	25,68,05,810	21,50,87,070
1898-99	1,12,03,40,680	121,208,006	3,91,13,310	3,882,768	403,00,640	21,44,12,330
1899-1900	1,12,47,47,010	124,141,401	3,90,66,317	3,877,020	—17,00,070	20,81,88,231
1900-01	1,15,33,10,068	133,435,377	4,00,68,000	4,166,351	2,85,22,048	20,36,22,034
1901-02	1,10,10,13,888	131,307,060	4,03,00,616	4,213,821	85,04,776	20,36,22,034
1902-03	1,17,65,40,600	133,700,201	4,08,37,864	4,213,821	1,30,20,827	18,03,35,034
1903-04	1,19,42,43,035	133,045,814	4,14,00,006	4,228,273	1,87,02,375	17,13,02,234
1904-05	1,22,20,78,538	132,887,101	4,24,02,526	4,288,744	2,87,35,200	16,81,65,224
1905-06	1,20,08,10,015	140,467,430	4,38,10,305	4,716,233	1,78,22,383	16,81,65,224
1906-07	1,30,43,56,655	147,618,034	4,53,38,937	4,743,108	1,47,10,017	16,81,65,224
1907-08	1,32,82,01,965	160,481,074	4,61,00,110	5,053,632	2,37,14,100	16,81,65,224
1908-09	1,31,50,00,605	160,973,360	4,68,10,107	5,210,606	2,73,66,650	16,81,65,224
1909-10	1,30,84,33,106	170,105,911	4,70,47,428	5,330,768	2,27,72,000	16,81,65,224
1910-11	1,38,00,22,165	177,008,336	4,81,24,302	5,008,417	1,25,30,050	16,81,65,224
1911-12	1,30,00,36,205	178,180,607	4,87,70,468	5,705,507	1,50,04,050	16,81,65,224
1912-13	1,42,83,44,700	170,170,103	5,80,00,000	6,704,885	—	16,81,65,224
1913-14	1,53,80,30,100	182,667,267	—	6,002,300	—	16,81,65,224

THE RUPEE DEBT.

Return of the Interest Bearing Rupee Debt of the Government of India as at 31st August 1915

In Thousands of Rupees

Particulars	Date of Issue	Conditions of Repayment	Amount	Total.
Railway Loans— Maharaja Holkar 4 p c (1870-77) Maharaja Scindia 4 p c (1892-93)	(1870-77) (1892-93)	After 101 years Perpetual After one year's notice to be given on or after 1st Dec 1917 By annual instalments of 12 lakhs On or before 30th Novem- ber 1923, but not preceding 30th November 1920 with three months' previous notice	10000 15000 1700	29700
Special Loans— Gwalior, 4 p c 1887	(1913-16)		12200	12200
Four p c Terminable Loan			46273	46273
Three and Half per cent 1842-43 1854-55 Reduced, 1878 1900-1	1st Feb 1843 30th June 1854 1st May 1865 16th Jan 1878 30th June 1900 22nd July 1896		224225 330107 5960 370257 38993 307260 81266	1381902
1896-97			81266	1551341

DISTRIBUTION OF RUPEE DEBT.

(a) Inclusive of 1273 representing Loan raised through Post Office during the month

Calcutta	India	Madras	Bombay	Total India
24151 600074 47211	29700 12200 1431 272256 12400	6268 85428 6355	13210 337412 12851	29700 12200 5060 1235170 78317
671436	327987	98051	362973	1460447

Railway Loans
Special Loan
4 per cent
3½ per cent
3 per cent

Proportion in
India held by

Indians

Europeans

Held in
London

Unissued

Total
as above

29700 12200 11225 75208 30113	43835 559002 48294	807324 (2949	1213	1551341
818506	641941	89681	1213	1551341

Railway Loans
Special Loan
4 per cent
3½ per cent
3 per cent

STERLING DEBT

Debt Bearing Interest		Capital of Debt.		Rate %		Annual Interest payable	
31st March 1914	31st March 1915	31st March 1914	31st March 1915			31st March 1914	31st March 1915

India 3½ per cent Stock	9121186	91137350	60212384	11806837	2500000	1435650	1435650	425000	2701450	2701450	407500	16584	177048173	18317374	9305	7279	16584	17704757	183190358	5781418	5752899
India 3 per cent Stock	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384	60212384
India 2½ per cent Stock	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837	11806837
India Bonds	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000	2500000
India Bills	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650
East India Railway Debenture Stock	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650	1435650
Eastern Bengal Ry. Debenture Stock	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000	425000
South India Ry. Debenture Stock	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450	2701450
G I P Railway Debenture Stock	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500	407500
Indian Midland Ry. Debentures	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584	16584
Debt not bearing Interest—	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305	9305
India 4 per cent Stock	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279	7279
Total Debt and Annual Interest thereon on 31st March 1915	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173	177048173

INDIAN RAILWAY ANNUITIES.

East Indian Railway	Annuitiy terminating in 1953	Interest in lieu of deferred annuity	Eastern Bengal Railway Annuitiy terminating in 1957	Scindh Punjab & Delhi Railway Annuitiy terminating in 1958	G I P Railway Annuitiy terminating in 1948	Madras Railway Annuitiy terminating in 1956	Total Indian Railway Annuities on 31st March 1914		(Values figures not available)
							31st March 1914.	31st March 1915	
	850538	262000	116551	371381	1268516	488381	3357647		

THE INDIAN MINTS.

The Mint in Calcutta dates from the end of the 17th century. The present building, designed by Major N. W. Forbes, was opened in 1831, the central portico being held to be "a copy, on half dimensions, of the temple of Minerva at Athens." The Copper Mint, to the north-east of the Silver Mint, was opened in 1865

Mint Master, Major A. L. C. McCormick, R.E.
Deputy Mint Master, Lieut-Col. J. J. Bourke, R.E.
Assay Master, Lieut-Col. F. J. C. Hughes, I.A. F.C.S.
The Bombay Mint—The first Mint established in Bombay, in 1670, was for the coinage of Mints.

Mint Master, Major G. H. Mills, M.V.O., R.E.
Assistant Mint Master, Mr. A. L. B. Gordon.
Assay Master, Lt.-Colonel J. Lloyd Thomas Jones, I.M.S.
Deputy Assay Master, Capt. H. J. Wallis, I.A.
 During the year 1914-1915 gold to the value of Rs. 2,83,63,350 was tendered at the two Mints.

[illegible]

One rupee = 100 grains of fine silver.
 One shilling = 80 $\frac{1}{2}$ grains of fine silver.
 One rupee = shillings 2 0339.

Copper and Bronze

* Copper coinage was introduced into the
 General Presidency by Act XVII of 1835, and
 into the Madras and Bombay Presidencies by
 Act XXII of 1814.
 The weight of the copper coins struck under
 Act XVII of 1870 remained the same as it was
 in 1835. It was as follows —

Grains	200
trov.	100
	50
	25
	12
	6
	3
	1

Double piece, or half anna
 Half piece, or one-eighth of an anna
 Pic being one third of a piece or one-
 twelfth of an anna
 The weight and dimensions of bronze coins
 are as follows —

Diameter	25 f
Weight in grains	75
Standard	37 $\frac{1}{2}$
Grains Troy	25
	17 f5
	21 f6
	25 f

Nickel

The Act of 1904 also provides for the coinage
 of a nickel coin. It was directed that the nickel
 one anna piece should therefore be coined at
 the mint and issue. The notification also pres-
 cribed the design of the coin, which has a waved
 profile with a scalloped edge. The greatest diameter
 of the coin being 21 millimetres, and its least
 diameter 19.8 millimetres. The desirability of
 issuing a half anna nickel coin was considered
 by the Government of India in 1909, but after
 consultation with Local Governments it was
 decided not to take action in this direction until
 the people had become thoroughly familiar with
 the present one anna coin.

The Paper Currency.

Under Acts VI of 1830, III of 1840, and IX of 1843, the Presidency Banks of Bengal, Bombay, and Madras were authorised to issue notes payable on demand, but the issue of the notes was practically limited to the three cities of Calcutta, Bombay, and Madras. These Acts were repealed, on the 1st March 1862, by Act XIX of 1861, providing for the issue of a paper currency through a Government Department, by means of notes of the Government of India payable to bearer on demand. Since then no banks have been allowed to issue notes in India.

Act II of 1910 amended and consolidated the law on the subject. By it, a note of the value of fifty rupees, as well as a note of any portion, of any pay mnt, either to Government say, whenever a note forms the integral sum or the amount expressed in that note, that is to (except by Government at the office of issue) for every note is a legal tender in its own circle. Notes of higher denominations than five, ten, fifty and hundred rupees are payable only at the office or office of issue of the town in which they have been issued in ordinary circumstances every Government treasury, of which there are about 250 in British India, cashes or exchanges, and when this cannot be done conveniently for large sums, small sums can generally be exchanged for travellers.

Notes when legal tender

The whole amount of currency notes in circulation is secured by a reserve of gold and silver coin or bullion and securities of the Government of India or of the United Kingdom. The total amount of such securities is limited to 140 millions of rupees, of which not more than 40 millions of rupees may be in sterling securities. Under the Act of 1882 the maximum limit of the securities was fixed at sixty millions of rupees, but, the issues having largely expanded, the Government of India was empowered by Act XV of 1890 to raise the limit to eighty millions. The power was utilised to make the invested reserve to seventy millions on the 18th December 1890, and to eighty millions a year later, on the 3rd December 1891. By notification No. 5366 of the 18th December 1896, the invested reserve was raised to one hundred millions, the power to do so having been given by Act XXI of 1896. Act III of 1905 raised the limit to 120 millions and in August of that year 20 millions of the reserve were invested by the Secretary of State in consols and exchequer bonds. In 1907-08 the exchequer bonds were replaced by Consols. By Act VII of 1911 the limit was raised further to 140 millions, and in April of that year 20 millions were invested by the Secretary of State in Consols.

Reserve

The function of this department is to issue, without any limits, promissory notes (called currency notes) of the Government of India payable to the bearer on demand, of the denominations of Rs 5, 10, 50, 100, 500, 1,000, and 10,000, the issue being made in exchange for rupees or half rupees or for gold coin, which is not legal tender, from any Paper Currency office or agency, and for gold bullion and gold coin, which is not legal tender, from circle offices on the requisition of the Comptroller General. Supply and issue of Currency Notes. Currency notes are supplied by the Secretary of State through the Bank of England on an indent from the Head Commissioner. The Head Commissioner or Commissioners supply the purposes of the Paper Currency Act. Every such note, other than a "universal" note, bears upon it the name of the place from which it is issued and every note is impressed with the signature of the Head Commissioner or of a Commissioner or Deputy Commissioner. The officers in charge of the circles of issue are authorised to issue, from the office or offices established in their circles, currency notes in exchange for the amount thereof (1) in rupees or half rupees or in gold coin which is legal tender under the Indian Coinage Act, or in rupees made under the Native Coinage Act, IX of 1876, in this way been held in London during 1890 and seasons of stress. A certain amount of gold had temporary relief to the Indian money market in object of these enactments was merely to afford bullion) in London instead of in India. The Government of India had obtained authority to hold a part of the metallic portion of the reserve in gold coin (or temporarily in silver) under the Gold Note Acts of 1898 and 1900, made under the Gold Note Acts of 1898 and 1900, Commission or Deputy Commissioner.

country. No moratorium was declared and the exchange value of the rupee was maintained throughout between the gold points. Of recent years steps have been taken to increase the popularity of the Note issue. The first important measure was the universal-ation of Notes up to Rs 100, instead of con-ting the facilities for encasement to the circle of issue. In 1914-15 two other important steps were taken. It was decided not to re-issue Notes, and so to eliminate the cost and the paper that is sometimes found in cur-culation. Orders were also passed that Govern-ment Treasuries should freely exchange Notes for coins and vice versa up to the limit of their power. The introduction of an improved form of Note is under consideration. At the close of the financial year, that is to say March 31st 1915, the actual state of the Paper Currency was as follows —

31st March 1915	Rs
61,63,00,000	TOTAL CIRCULATION
32,34,00,000	Silver Coin in India
7,64,00,000	Gold Coin and Bullion in India
7,65,00,000	Securities held in India
9,99,99,946	Securities held in England
61,63,00,000	TOTAL RESERVE

It was the policy of the Government of India to give gold from the Paper Currency Reserve freely on demand. But when the war broke out, it became apparent that gold was being with-drawn from the Reserve not to meet legitimate demands, but to speculate. Sovereigns were at a premium in the bazaar, and those who commanded funds took sovereigns from the Paper Currency Reserve and sold them at a profit. Government accordingly declined to issue sovereigns in sums smaller than ten thou-sand pounds at a time, but as the speculators then clubbed together and formed syndicates to withdraw sovereigns, an absolute embargo was placed on the issue of gold. The effect of these withdrawals, or the abolition of the Silver Branch or the Gold Standard Reserve, and of the transfer of gold from the Paper Currency Reserve to the Gold Standard Reserve in payment of Reverse Councils is seen in the last official statement showing the composition of the Paper Currency Reserve —

25th November 1915	Rs
61,92,19,990	TOTAL CIRCULATION
34,20,93,988	Silver Coin in India
7,60,26,106	Gold Coin and Bullion in India
6,15,00,000	Securities held in India
9,99,99,946	Securities held in England
4,00,00,000	TOTAL RESERVE

The interest accruing on the invested reserve is entered in a separate account, and credit of the Government of India in

1900, but not to any large extent, and the occasion for doing so ceased, except in regard to gold in transit, from the middle of 1900. Act II of 1910, however, gives full power to hold the metallic portion of the reserve or any part of it, either in London or in India or partly in both places, and also in gold coin or bullion or in rupees or silver bullion, at the free discretion of the Government subject only to the exception that rupees should be kept only in India and not in London. A currency chest was accordingly opened in London and a sum of £6,00,000 was remitted from India in pursuance of this policy, and a further sum of £1,045,000 was transferred to the chest from the Secretary of State's balance during the course of 1905-06. On the 31st March 1915 the London currency chest held £ 5,100,000 (Rs 765 lakhs) on behalf of the Currency Reserve.

The metallic reserve may consist of sovereigns, half sovereigns, rupees, and half rupees, and gold and silver bullion, the last named being valued at the sum spent on the purchase of such bullion. No gold was con-tained in the reserve between March 1876 and February 1898, and the quantity increased very slowly until February 1899, but from that date it rose rapidly, till the end of March 1900 when it amounted to £7,500,012. Government then took measures to reduce what was considered to be an inconveniently large gold reserve, and at the end of March 1901 the value of the gold reserve had fallen to £5,178,518. In the next three years it again increased continuously from £7,023,921 at the end of 1901-02 to £9,859,564 at the end of 1902-03 and £10,789,567 at the end of 1903-04. During the next three years it remained practically steady, the amount held on the 31st March 1907 being £10,688,411. In 1907-08 the serious monetary crisis in America and the contraction in the exports from India owing to the famine led to a very large increase in the demand for gold at the Currency offices with the result that on the 31st March 1908 the value of the gold reserve had fallen to £9,417,841 inclusive of £3,705,000 held in England. Adverse trade conditions continued in 1908-09 and on the 31st March 1909 the gold reserve had dwindled down to £1,238,414, of which £1,500,000 was held in England. Normal conditions returned in 1909-10 and the stock of gold in the reserve rose to £8,701,716 on 31st March 1910. On the 31st March 1915 the stock in the reserve amounted to £ 10,200,000 Rs (1,529 lakhs).

Effect of the War
The outbreak of the war found the Govern-ment of India in such a strong financial position that it was able to meet with ease all demands upon it. The effect of the war on Finance (q v) is fully discussed in the articles dealing with those two subjects. Here it is sufficient to say that there was a reduction in the demand for currency, due to the slackness of trade, and that the temporary decline of confidence in the Note issue, indicated by an unusual demand for encasement in August and September 1914, showed no signs of recurring. In the words of the London "Economic Jour-nal," the Indian currency system met the crisis better than that of almost any other

"Profits of note circulation " The interest on the one hundred and forty millions of rupees in the invested reserve amounted in 1914-15 Rs 46,35,855 the expenditure of the Department being Rs 18,56,117 and the profit Rs 28,63,225

The average monthly circulation of the notes has been in millions of rupees —

— has been in millions of rupees —

Circulation

Year	Number of cases	Rate per 100,000
1985-86	142	0.5
1986-87	171	0.7
1987-88	282	1.1
1988-89	263	1.0
1989-90	301	1.2
1990-91	381	1.5
1991-92	414	1.6
1992-93	451	1.8
1993-94	481	2.0
1994-95	514	2.2
1995-96	541	2.4
1996-97	571	2.6
1997-98	601	2.8
1998-99	631	3.0
1999-00	661	3.2
2000-01	691	3.4
2001-02	721	3.6
2002-03	751	3.8
2003-04	781	4.0
2004-05	811	4.2
2005-06	841	4.4
2006-07	871	4.6
2007-08	901	4.8
2008-09	931	5.0
2009-10	961	5.2
2010-11	991	5.4
2011-12	1021	5.6
2012-13	1051	5.8
2013-14	1081	6.0
2014-15	1111	6.2
2015-16	1141	6.4
2016-17	1171	6.6
2017-18	1201	6.8
2018-19	1231	7.0
2019-20	1261	7.2
2020-21	1291	7.4
2021-22	1321	7.6
2022-23	1351	7.8
2023-24	1381	8.0
2024-25	1411	8.2
2025-26	1441	8.4
2026-27	1471	8.6
2027-28	1501	8.8
2028-29	1531	9.0
2029-30	1561	9.2
2030-31	1591	9.4
2031-32	1621	9.6
2032-33	1651	9.8
2033-34	1681	10.0
2034-35	1711	10.2
2035-36	1741	10.4
2036-37	1771	10.6
2037-38	1801	10.8
2038-39	1831	11.0
2039-40	1861	11.2
2040-41	1891	11.4
2041-42	1921	11.6
2042-43	1951	11.8
2043-44	1981	12.0
2044-45	2011	12.2
2045-46	2041	12.4
2046-47	2071	12.6
2047-48	2101	12.8
2048-49	2131	13.0
2049-50	2161	13.2
2050-51	2191	13.4
2051-52	2221	13.6
2052-53	2251	13.8
2053-54	2281	14.0
2054-55	2311	14.2
2055-56	2341	14.4
2056-57	2371	14.6
2057-58	2401	14.8
2058-59	2431	15.0
2059-60	2461	15.2
2060-61	2491	15.4
2061-62	2521	15.6
2062-63	2551	15.8
2063-64	2581	16.0
2064-65	2611	16.2
2065-66	2641	16.4
2066-67	2671	16.6
2067-68	2701	16.8
2068-69	2731	17.0
2069-70	2761	17.2
2070-71	2791	17.4
2071-72	2821	17.6
2072-73	2851	17.8
2073-74	2881	18.0
2074-75	2911	18.2
2075-76	2941	18.4
2076-77	2971	18.6
2077-78	3001	18.8
2078-79	3031	19.0
2079-80	3061	19.2
2080-81	3091	19.4
2081-82	3121	19.6
2082-83	3151	19.8
2083-84	3181	20.0
2084-85	3211	20.2
2085-86	3241	20.4
2086-87	3271	20.6
2087-88	3301	20.8

The Gold Standard Reserve.

The Gold Reserve Fund was first started in the beginning of 1901 when the profits which had accrued from the coinage of rupees from April 1900 amounting to 53 millions were credited to the fund, gradually remitted to England from time to time and there invested in sterling securities. In the following years the demand for rupees for trade requirements necessitated further heavy coinage and the investments held in the Gold Reserve Fund rapidly swelled by the credit of the profits and the interest thereon and amounted at the close of 1905-06 to 51½ millions. During the latter half of this year, abnormal trade activity resulted in an unprecedented demand for silver currency and necessitated exception-ally heavy coinage in a short space of time. To avoid the possibility of a recurrence of similar inconvenience, a separate silver branch of the Gold Reserve Fund was formed and was brought up to its proposed limit of rupees 6 crores (£4 millions) by March 1907, and after being for a short time known as the 'Gold and Silver Reserve Fund' it was finally named the Gold Standard Reserve. At the close of 1906-07, the Reserve contained nearly £17 millions, of which £12½ millions were held in securities, 5½ millions in rupees in India and the rest in gold in India and as a book credit. It is not necessary in this report to recount the events of the latter half of 1907-08. It will be sufficient to mention that the sale in India during the first half of 1908-09 of sterling bills on London resulted in the withdrawal from circulation in India of some Rs 12 crores, the equivalent being withdrawn in gold by the Secretary of State from the Reserve in London, put on the market. By November 1908, the silver in the Reserve in India had reached 18 65 crores. The subsequent improvement in trade conditions necessitated a portion of this silver being transferred to the Paper Currency Department to meet notes and frequent similar transfers continued to be made, the account being adjusted by a transfer in the opposite direction in London, made in gold from the Cur-

Effects of the War—The recommendations of the (War) Finance Commission regarding the policy to be pursued toward the Gold Standard Reserve will be found explained in detail in the section Currency (monetary) Briefly, they were that the silver branch of the Reserve should be abolished, and the rupees in the Reserve transferred to the Paper Currency Reserve in exchange for an equivalent in gold, that a much larger gold holding, in liquid gold, of State should be prepared to sell sterling bills and telegraphic transfers on London, or Reverse Councils as they are sometimes called, on demand. Unfortunately the war broke out before there was time for this policy to be carried into effect, so the emergency fund the Reserve in a transition stage. The measures adopted were prompt and efficacious. The silver branch of the Reserve was abolished by transferring the rupees therein to the Paper Currency Reserve in exchange for an equivalent in sovereigns, so that the Reserve was composed entirely of gold and gold securities. After a brief interval, necessary to consult the Secretary of State, who naturally had to colour his arrangements by the abnormal financial conditions prevailing in London, a notification was issued early in August to the effect that Government would be prepared to sell sterling bills and telegraphic transfers on London to the extent of a million sterling a week, at the following rates—Bills 1-3-29 3/4 and telegraphic transfers 1-3-27 3/4. This at once steadied the exchanges, and the extent of the appended tables will show the comparative position of the Gold Standard Reserve brought about by this policy, and the demand for sterling bills —

Sterling Bills—The following table shows the details of the weekly allotments since the reverse remittances were first offered—continued

Date	Credit	Debit	Balance
December 3, 1911	1,000,000	235,000	765,000
" 10, 1911	1,000,000	171,000	829,000
" 17, 1911	1,000,000	101,000	928,000
" 23, 1911	1,000,000	170,000	758,000
" 30, 1911	1,000,000	30,000	728,000
January 7, 1912	1,000,000	100,000	628,000
" 14, 1912	1,000,000	75,000	553,000
" 21, 1912	1,000,000		553,000
" 28, 1912	1,000,000		553,000
February 4, 1912	1,000,000	50,000	503,000
" 11, 1912	1,000,000		503,000
" 18, 1912	1,000,000		503,000
" 25, 1912	1,000,000		503,000
March 4, 1912	1,000,000		503,000
" 11, 1912	1,000,000		503,000
" 18, 1912	1,000,000		503,000
" 25, 1912	1,000,000		503,000
April 1, 1912	1,000,000		503,000
" 8, 1912	1,000,000		503,000
" 22, 1912	1,000,000		503,000
" 29, 1912	1,000,000		503,000
May 6, 1912	1,000,000		503,000
" 13, 1912	1,000,000		503,000
" 20, 1912	1,000,000		503,000
" 27, 1912	1,000,000		503,000
June 3, 1912	1,000,000		503,000
" 10, 1912	1,000,000		503,000
" 17, 1912	1,000,000		503,000
" 24, 1912	1,000,000		503,000
July 2, 1912	1,000,000		503,000
" 9, 1912	1,000,000		503,000
" 16, 1912	1,000,000		503,000
" 23, 1912	1,000,000		503,000
" 30, 1912	1,000,000		503,000
August 6, 1912	1,000,000		503,000
" 13, 1912	1,000,000		503,000
" 20, 1912	1,000,000		503,000
September 3, 1912	1,000,000		503,000
" 10, 1912	1,000,000		503,000
" 17, 1912	1,000,000		503,000
" 24, 1912	1,000,000		503,000
October 1, 1912	1,000,000		503,000

HEADS OF REVENUE	1005-06									
	1005-06	1006-07	1007-08	1008-09	1009-10	1010-11	1011-12	1012-13		
PRINCIPAL HEADS OF REVENUE										
Land Revenue	18,835,080	19,703,701	18,710,322	19,750,000	21,332,111	20,877,521	20,761,097	21,322,103		
Opium	6,408,780	6,060,628	6,214,980	6,881,788	6,531,083	7,521,962	6,001,272	6,121,502		
Salt	4,370,410	1,302,700	3,338,098	3,270,160	3,310,638	3,173,950	3,391,276	3,131,371		
Stamps	3,020,301	1,020,008	4,250,610	4,358,304	4,318,304	4,811,691	1,816,129	5,002,115		
Excise	6,687,820	6,898,210	6,227,010	6,380,028	6,617,851	7,030,314	6,18,680	8,277,910		
Provincial Rates	953,001	610,671	625,820	634,233	630,233	551,178	519,530	552,340		
Customs	4,338,017	4,351,002	6,001,494	1,832,204	1,905,118	0,010,000	0,408,667	7,197,243		
Assesse's Dues	1,321,303	1,423,767	1,504,113	1,653,119	1,338,904	1,503,301	1,052,858	1,742,397		
Assesse's Dues	1,770,600	1,708,911	1,702,010	1,700,891	1,735,386	1,820,657	1,052,179	1,151,009		
Forest	301,050	370,736	415,311	480,940	430,377	425,855	415,802	482,022		
Registration	507,430	600,086	584,520	580,030	588,307	607,147	507,005	623,512		
Tributes from Native States										
TOTAL	47,057,380	48,786,035	47,650,832	49,204,535	51,089,875	50,040,085	51,205,240	53,838,830		
INTEREST	• • •	072,103	005,767	037,325	1,181,343	1,405,430	1,448,741	1,473,708		
Post Office	• • •	1,050,724	1,751,146	1,623,090	1,825,020	1,027,280	2,134,279	2,202,136		
TELEGRAPH	• • •	000,854	033,006	1,006,707	078,007	002,851	097,150	1,087,425		
NINE	• • •	321,183	410,198	443,018	102,054	125,053	106,110	307,100		
RECEIPTS BY CIVIL DEPARTMENTS										
LAW and Justice										
Courts of Law	276,538	271,423	264,057	230,117	208,339	310,603	323,000	352,051		
Jails	253,220	251,718	254,403	230,234	230,165	237,791	233,334	270,062		
Police	109,872	150,310	153,651	158,123	148,060	155,373	122,738	135,556		
Ports and Pilots	146,406	143,062	138,870	139,088	140,983	146,531	151,737	150,746		
Education	130,436	140,988	143,285	158,430	108,875	183,030	203,010	220,126		
Medical	69,310	65,040	62,469	60,640	68,235	63,007	60,847	82,605		
Scientific and other Minor Departments	84,323	89,782	89,154	100,536	100,438	113,432	114,185	111,804		
TOTAL	1,184,210	1,100,820	1,007,010	1,145,077	1,146,076	1,211,123	1,238,121	1,334,847		
UNCLASSIFIED RECEIPTS										
Receipts in aid of Superannuation, &c	106,421	101,887	221,636	105,011	102,086	195,480	201,470	200,386		
Stationery and Printing	73,715	78,745	91,472	95,608	95,384	97,656	96,801	92,078		
Exchange	82,870	100,022	94,611	95,608	44,461	70,084	105,697	100,870		
Miscellaneous	334,487	478,947	304,012	285,126	373,097	314,062	400,018	351,864		
TOTAL	687,493	930,601	711,631	575,705	705,889	677,801	818,076	765,207		

GROSS REVENUE IN INDIA AND ENGLAND, IN £ (16 RUPREES=£1)—(contd.)

HEADS OF REVENUE	1905-6	1906-7	1907-8	1908-9	1909-10	1910-11	1911-12	1912-13
RAILWAYS State Railways (Gross Receipts)	£ 23,680,670	£ 25,781,078	£ 27,200,944	£ 26,700,888	£ 28,023,031	£ 30,620,756	£ 33,670,120	£ 36,086,364
<i>Debt—</i> Working Expenses and Surplus Profits paid to Companies	11,047,231	13,252,245	16,078,834	16,013,080	16,530,801	16,787,041	17,746,040	19,301,720
Net Receipts Guaranteed Companies (Net Traffic Receipts) Subsidized Companies (Government share of Surplus Profits and Repayment of Advances of Interest)	11,042,348 921,976 42,028	12,628,833 308,801 60,180	12,218,110 228,615 62,006	9,880,700 —901 72,203	12,387,130 —48 68,206	13,842,115 — 30,346	15,834,080 — 67,645	17,204,035 3,980 73,174
TOTAL	12,006,051	12,083,823	12,400,331	9,958,041	12,415,378	13,881,401	16,801,725	17,371,780
IRRIGATION Major Works	1,800,166	2,342,231	2,208,014	2,247,624	2,307,077	2,288,051	2,381,533	2,607,478
Direct Receipts	908,770	1,000,081	1,040,533	1,001,044	1,117,388	1,178,005	1,351,405	1,638,245
Portion of Land Revenue due to Irrigation	104,673	183,705	232,045	210,334	235,691	228,405	247,054	265,404
TOTAL	3,002,608	3,532,017	3,480,592	3,558,002	3,600,160	3,693,521	3,980,052	4,411,217
OTHER CIVIL PUBLIC WORKS	264,604	287,893	210,006	287,038	268,780	293,843	326,024	355,447
REVENUES BY MILITARY DEPARTMENT Army	1,058,373	1,005,514	908,540	764,710	875,657	948,154	1,061,030	1,107,244
Effective	131,028	122,055	113,030	98,100	102,171	110,495	118,330	120,559
Non-effective	205	.	.	.	.	.	.	.
Re-organisation	.	.	.	.	.	.	.	.
Marine	1,180,000	1,217,600	1,022,479	862,940	977,728	1,058,640	1,170,366	1,227,808
Military Works	143,770	148,175	87,086	125,448	83,400	91,787	84,000	87,069
.	40,306	60,000	67,208	60,254	75,773	70,693	78,701	72,162
TOTAL	1,382,772	1,410,743	1,167,433	1,047,641	1,136,061	1,221,020	1,343,057	1,387,034
TOTAL REVENUE	70,841,860	73,144,654	71,003,276	69,701,535	74,603,105	80,082,473	82,835,750	86,802,508

should be established, and the ratio between the rupee and the sovereign was to be fifteen to one. The mints were to be opened for the public for the coinage of silver Government alone were to have the right to coin silver, subject to directions laid down, and the profits accumulated from this coinage were to be appropriated to form a special reserve in gold. It is of the greatest importance to remember that the Fowler Committee recommended that there should be the normal accompaniment of a gold standard—a gold currency and a gold mint, and emphatically put aside the suggestion that there should be a gold standard without a gold currency—a system which has since obtained some measure of academic support under the name of the gold exchange standard. The chief criticisms of the policy actually pursued centre round the broad issue that whilst accepting the Fowler Committee's recommendations in principle the Government on the advice of a Finance Committee on which the Indian element was reduced until it disappeared, departed from them in practice. With this introduction, we can consider the criticisms levelled at the practices specifically referred to the Chamberlain Committee.

Cash Balances.

The cash balances of the Government of India are held in part in India and in part in London. This arises from the necessity of meeting obligations in both countries. For disbursements with a balance of between four and five millions sterling. But from 1907 onwards this policy was reversed and enormous balances were heaped up in London. The growth of these balances is illustrated by the following figures—

1907	4,607,266
1908	7,983,898
1909	12,799,090
1910	16,697,245
1911	15,292,638
1912	18,390,013

£

Council Bills

Arising out of this question of the balances in London was the subsidiary one of the rates at which the Secretary of State sold Bills and Telegraphic Transfers on India. The Secretary of State has to meet his Home Charges in London. To do this he sells what are called Council Bills every week. These Bills are offered for tender at the Bank of England every Wednesday morning and successful tenders are given Bills on Bombay, Calcutta and Madras, which are cashed at the Treasury. It is worth paying extra to obtain in transit, it is worth paying extra to obtain what are called Telegraphic Transfers, by means of which rupees can be obtained from the Treasury in India almost immediately after the payment of gold into the account of the Secretary of State in London. Telegraphic Transfers usually sell at a rate of one thirty-second above the rate for Bills. In addition to the weekly allotment the India Office sell bills called "specials" between the weekly allotments, at one thirty-second above the auction rate. The criticism directed against this practice was to the effect that on occasion lower rates were accepted than might have been obtained, and that Bills against the Gold Standard and Paper Currency Reserves were sold below gold export point, thereby diverting the natural flow of gold to India.

Exchange Value of the Rupee.

The buttress of the gold standard under the system recommended by the Fowler Committee was to have been twofold—a gold currency, and a special reserve, built up out of profits on coinage. It was made the ground of criticism that having decided to adopt these principles, the India Office did practically nothing to establish an effective gold currency. After one abortive attempt, the policy was abandoned. On the other hand, the coinage of rupees was prodigiously heavy. During the years 1905-07 £42 millions' worth of rupees were added to the token currency, which is said to be the heaviest coinage in the history of the world. The result was that instead of endowing India with a gold currency and a subsidiary token coinage, the vast bulk of the metallic circulation was in rupees. The standard was gold, but the circulating medium was silver. According to the latest returns the currency of India is made up of sixty crores of gold, sixty crores of notes, and one hundred and eighty crores of rupees. A certain amount of gold has flowed into the country and has passed into the circulation in the form of sovereigns, but it was confined to the production of token rupees, the lack of any definite policy to popularise the sovereign, and the failure to open the Indian mints to the coinage of a gold piece of more convenient value than the fifteen rupees sovereign, had resulted in the establishment of a system never contemplated by the Fowler Committee, namely, an enormous token currency with a small gold circulation.

and all attempts to have the funds placed at the disposal of the market had met with a practical non success.

Gold Standard Reserve.

Falling an effect of gold circulation, the fund formed from the profits on coinage, called the Gold Standard Reserve, became the only effective buttress of exchange. It was complained that whereas the principle laid down for the management of this fund was clear and definite, they had been systematically departed from in practice. For instance, it is now admitted that the Reserve Committee is not to be held in gold in India contrary to the express desire of the government of India the Secretary of State decided that it should be held in silver in London. Then in 1906, in order to meet an embargo demand for rupees at the 1907 of the busy season in India, it was decided to hold £2 millions of the Reserve in silver in India. In 1907, it was proposed for railway construction in India, the Indian Council decided to devote half the profits on coinage to capital expenditure on railways. These changes were made without consulting the great commercial interests affected, and so far as the diversion of a moiety of the profits on coinage was concerned, in direct opposition to the policy of the Government of India.

The critics maintained that their position was made good by the results of the crisis in America in 1907. The sudden cessation of the demand for Indian produce caused by the financial collapse in the United States, combined with a partial famine in India and the heavy arrival of imports in rupees to London dated contracts, reversed the tide of exchange for the first time since the gold standard was established. There was a demand for gold in London rather than for rupees in India. The Gold Standard Reserve, which should have been readily available for this purpose, then stood at £50,000 in money at short notice and £14 million in securities. There is no doubt that the weakness of the position thus revealed paralysed the action of the Government when the emergency arose. Council Bills were unsaleable. Gold was released only in dribbles of £10,000 at a time, and exchange, which was to have been maintained at one and four pence, fell to one-thrice eleven-sixteenths. Later, the India Office had to agree to sell sterling bills on London at gold export points, and £8 millions were taken in this way before the demand was stayed. Various other expedients had to be adopted in order to weather the storm, and it has been calculated that the deterioration in the Secretary of State's position in the year of the crisis was not far short of £25 millions. This experience has been cited as illustrative of the necessity of strengthening the gold reserves of India without any further tampering with the Gold Standard Reserve, of allowing that Reserve to grow without limit, and of keeping a substantial portion, if not the whole, in actual gold.

Apart from the withdrawal of the Gold Standard Reserve to London and its investment there, under an Act of 1905 a sum of £5 million of gold in the Paper Currency Reserve was withdrawn from the Indian Treasury and deposited in the Bank of England under the unqualified control of the Secretary of State. The declared object of this fund was to facilitate the withdrawal of the Gold Standard Reserve, if not the whole, in actual gold. A further tampering with the Gold Standard Reserve, of allowing that Reserve to grow without limit, and of keeping a substantial portion, if not the whole, in actual gold, was not far short of £25 millions. This experience has been cited as illustrative of the necessity of strengthening the gold reserves of India without any further tampering with the Gold Standard Reserve, of allowing that Reserve to grow without limit, and of keeping a substantial portion, if not the whole, in actual gold.

The Commission commenced its sittings on May 27th, and rose for the recess on August 6th. It then issued what has been called an interim report, but which never pretended to be anything of the sort, and was confined to a reprint of the evidence given up to that point, without comment of any description. This blue book contained the important correspondence which had passed between the Government of India and the India Office on currency and finance questions together with memoranda from the India Office outlining their policy on the principal subjects under examination. It also contained the evidence of the official witnesses on behalf of the India Office—Mr Lionel Abraham, Mr B. Assistant Under Secretary of State for India, Mr E. W. Newmarch, Financial Secretary at the India Office, Mr H. H. Scott, Broker to the Secretary and Mr. Accountant General at the India Office, on 31st, 32nd, 33rd, 34th, 35th, 36th, 37th, 38th, 39th, 40th, 41st, 42nd, 43rd, 44th, 45th, 46th, 47th, 48th, 49th, 50th, 51st, 52nd, 53rd, 54th, 55th, 56th, 57th, 58th, 59th, 60th, 61st, 62nd, 63rd, 64th, 65th, 66th, 67th, 68th, 69th, 70th, 71st, 72nd, 73rd, 74th, 75th, 76th, 77th, 78th, 79th, 80th, 81st, 82nd, 83rd, 84th, 85th, 86th, 87th, 88th, 89th, 90th, 91st, 92nd, 93rd, 94th, 95th, 96th, 97th, 98th, 99th, 100th.

of State in Council Then followed many miscellaneous witnesses, whose names and qualifications are given below

Sir Daniel Mackinnon Hamilton, nominated by the Bengal Chamber of Commerce, Indian Government of India

Mr J A Toomey, Manager of the National Bank of India, Limited

Mr T Fraser, Manager of the Chartered Bank of India, Australia and China, Nominated as their representatives by the Exchange Banks doing business in India

Mr O C Barrow, C.S.I., formerly Comptroller and Auditor General in India (1903-1910), retired Witness on behalf of the Government of India

Mr Alfred Chayton Cole, Governor of the Bank of England, 1911-1913

Mr Harry Marshall Ross, retired Calcutta Export Merchant, late Honorary Secretary, Central Committee, Indian Currency Association, Nominated by the Bengal Chamber of Commerce

Sir Alexander McRobert, Indian Woollen Manufacturer, a former President of the Upper India Chamber of Commerce, and a former Member of the Legislative Council of the United Provinces, Nominated by the United Provinces Government

Mr Bhupendra Nath Mitra, C.I.E., Assistant Secretary to the Government of India in the Finance Department Witness on behalf of the Government of India

Mr James N Graham, nominated by the Bombay Chamber of Commerce

The Hon Montagu de P Webb, C.I.E., Chairman of the Karachi Chamber of Commerce

Mr William Bernard Hunter, Secretary and Treasurer of the Bank of Madras and Chairman of the Madras Chamber of Commerce

Mr Charles Campbell McLeod, nominated by the Bengal Chamber of Commerce and the East India Section of the London Chamber of Commerce

Mr Marshall F Reid, C.I.E., Merchant, Member of the Legislative Council, Bombay

Mr Le Marchant, a former Member of the Indian Council and a former Chairman of its Finance Committee A Member of the Indian Currency Committee of 1898.

THE REPORT.

The report was dated February 24th, 1914, some delay occurring through the necessity of referring it to Sir Henry Chalmers, who had taken up his post as Governor of Ceylon and Sir Shapurji Broacha, who had been obliged to return to Bombay on account of the severe financial crisis consequent on the failure of certain of the swadeshi banks. The report was long and detailed, so the Commission furnished a summary of it, which condensed their opinions and recommendations in the following passages —

1 The establishment of the exchange value of the rupee on a stable basis has been and is of the first importance to India

2, The measures adopted for the maintenance of the exchange value of the rupee have been necessarily and rightly rather supplementary

The time has now arrived for a reconsideration of the ultimate goal of the Indian Currency system. The belief of the Committee of 1898 was that a Gold Standard in India, but the history of the last 15 years shows that the Gold Standard has been firmly secured without this condition.

4, The time has now arrived for a reconsideration of the ultimate goal of the Indian Currency system. The belief of the Committee of 1898 was that a Gold Standard in India, but the history of the last 15 years shows that the Gold Standard has been firmly secured without this condition.

3, These measures worked well in the crisis of 1907-08, the only occasion upon which they have been severely tested hitherto

the Committee of 1898

in pursuance of, the recommendations of the Committee of 1898

plementary to, than in all respects directly

Secretary of State for India

Sir P W Holderness, K.C.S.I., Under Secretary of State for India

Mr Lionel Abrahams, C.B., Assistant Under Secretary of State for India

Mr Guy D A Fitchwood Wilson, C.I.E., K.C.B., K.C.I.G., late Finance Member of the Viceroy's Council

Mr Dadiabhai Merwanjee Dalal, Senior Partner Messrs Mercantile and Sons, Stock, Bullion Exchange by the Bombay Government

Sir Felix Schuster, Barrister, Member of the Indian Council and Chairman of its Finance Committee

Sir Felix Schuster, Barrister, Member of the Indian Council and Chairman of its Finance Committee

Lord Incheiqui, a former member of the Indian Council and its Finance Committee.

Mr Lawrence Currie, Member of the Indian Council and its Finance Committee.

Mr F C Harrison, C.S.I., Indian Civil Service (retired) who has held various posts in the Finance Department

Mr Stanley Reed LL.D., Editor of "The Times of India" Bombay

Mr Vidya Sagar Pandya, Secretary of the Indian Bank Ltd, Madras Nominated by the Madras Government

Mr Morton Trevelyan

Sir James Nicolson K.C.S.I., Lieutenant Governor of the United Provinces and formerly Secretary to Government in the Financial Department

It heard the following witnesses —

The Committee re-assembled on October 23rd and sat until November 1st. During this period it heard the following witnesses —

Final Meetings

by the Madras Government

Mr M R Sundari Iyer, Secretary to the Economic Association, Madras Nominated by the Madras Government

Mr Thomas Smith, nominated by the Government of the United Provinces for his knowledge of the Currency and Banking problems of North India

Mr H F Howard, C.I.D., I.C.S., Collector of Customs, Calcutta, Witness on behalf of the Government of India

Mr I G Dunbar, Secretary and Treasurer of the Bank of Bengal.

48 The Finance Committee should, if possible, contain three members with financial experience, representing —

(a) Indian Official Finance.

(b) Indian Banking and Commerce.

(c) The London Money Market.

In any case there should be at least one member with Indian financial experience. The absence of any representative of Indian finance on the Committee since 1911 has resulted in giving undue prominence to the representation of London City experience.

39 While we suggest that the changes recently proposed and now under discussion in the constitution of the India Council may require some modification in order to provide for the continuance of a Finance Committee of Council, we are in sympathy with the desire for expediting financial business, which is one of the objects in view.

40 The present arrangement under which the Assistant Under Secretary of State, having financial experience, is able to share with the Financial Secretary the responsibility for financial business in the India Office has many advantages. For the future we recommend that either (1) the Under Secretary or Assistant Under Secretary of State should have financial experience as at present, or (2) there should be two Assistants Under Secretary, of whom one should have financial experience.

41 We are not in a position to report either for or against the establishment of a State or Central Bank, but we regard the subject as one which deserves early and careful consideration, and suggests the appointment of a small expert committee to examine the whole question in India, and either to pronounce against the proposal or to work out in full detail a concrete scheme capable of immediate adoption.

A Note of Dissent.

The report was signed by Sir James Begbie subject to a note of dissent. In this he pointed out that the currency policy directed to the attainment of stability in the exchange value of the rupee by means of gold reserves collected from the profits realised on the coinage of rupees had brought into existence an extensive form of currency, which was not a desirable form of currency for a country which absorbs gold on a very large scale. Sir James Begbie held the view.

"That the true line of advance for the currency policy is to discourage an extension of the rupee currency by providing increased facilities for the distribution of gold when further increases in the current become necessary. These greater facilities should, I consider, include the issue of gold coins from an Indian mint of a value more suitable for general currency use than the sovereign and half-sovereign, for the purpose of assisting the distribution of gold when, as is frequently the case, the balance of trade is strong in India's favour and gold arrives in considerable quantities."

present regulations in regard to creating new forms of securities.

29 The Secretary of State sells Council Drafts, not for the convenience of trade, but to provide the funds needed in London to meet the requirements of the Secretary of State on India's behalf.

30 The India Office perhaps sold Council Drafts unnecessarily at very low rates on occasions when the London balance was in no need of replenishment, but we do not recommend any restrictions upon the absolute discretion of the Secretary of State as to the amount of drafts sold or the rate at which they are sold, provided that it is within the gold points. The amount and occasion of sales should be fixed with reference to the urgency of the Government's requirements, and the rate of exchange obtainable, whichever the drafts are against Treasury balances or against the reserves.

31 There has been some excess of caution in the renewal of debt by the India Office during recent years.

32 The system of placing portions of the India Office balance out on short loan with approved borrowers in the city of London is on the whole well managed, but we draw attention to —

(a) The term for which loans are made.

(b) The desirability of giving greater publicity to the methods by which admission is granted to the list of approved borrowers.

(c) Some defects in the list of approved securities and especially its narrow range.

33 There is no ground for the suggestion that the City members of the Secretary of State's Council showed any kind of favouritism in placing on deposit with certain banks, with the directors of which they were connected, a part of the India Office balance at a time when it was too large to be placed entirely with the approved borrowers. But we call the attention of the Secretary of State to the desirability of avoiding as far as possible all occasion for such criticism, though it may be founded on prejudice and ignorance of the facts.

34 We observe that in our opinion the time has come for a general review of the relations of the India Office to the Bank of England.

35 The working of the present arrangements for the remuneration of the Secretary of State's broker should be watched, and if necessary they should be revised.

36 We record our high opinion of the way in which the permanent staff, both in India and in London, have performed the complicated and difficult financial duties placed upon them.

37. We recommend a continuance of a Finance Committee of Council as providing the machinery most suitable for the work required.

I also think that supplies of gold coins should be laid down by the up-country districts with the object of giving the general public an effective opportunity of obtaining gold coins. Action in India

The publication of the report aroused surprisingly little interest. Only one paper in India, and none in England, exclusively analysed it. Broadly speaking, it may be said that the report was approved by those engaged in the foreign trade, whilst a strong body of those interested in the internal trade shared the views of Sir James Dudgeon. The statement of the Commission, that India neither desires nor needs a gold currency, was warmly canvassed and in an address to the Finance Member in July the Indian Secretary declared that the currency needs of India are silver and gold, and gold rather than silver.

But whilst action on the report as a whole has been deferred until after the termination of the war—included it is doubtful if any sort of general provision will be made on the report because of the great changes which have taken place in the world since 1914 the silver branch of the gold standard is being re-examined for an equivalent in gold taken from the Paper Currency Reserve. The gold standard Reserve—now constituted entirely of gold and gold securities. In 1914 a notation was issued guaranteeing to issue a sterling drams on the Secretary of State in London—these are called for convenience the Paper Council—at gold export point on demand. The extent of this demand will be found in the section dealing with the Paper Currency and the Gold Standard Reserve.

Another important step was taken by the Secretary of State when he announced that he had exchanged the Consol holding in the Gold Standard Reserve for the new four and a half per cent loan. The official communication said—"the Secretary of State has converted the entire holdings of Consols in the Gold Standard Reserve amounting to £3,266,391 into stock of the new war loan to the value of £2,177,591. This has been done partly by the acquisition of conversion rights from the public and to a smaller extent by a direct tender for the new loan." In the autumn of 1914, when there seemed to be every likelihood of a complete break in the price of cotton unless special steps were taken to enable holders to carry the crop, the Government of India stipulated the money market by offering the Presidency Bank to assist in the financing of threatened trades. This help was not needed, because cotton recovery in the autumn of 1914, when the value of the cotton with surprising celerity, and there has been a surplus, rather than a deficiency of money, on account of the paralysis of trade and the reduced demand. The question of a strike Bank is in abeyance. When the scheme was first mooted its reception was generally hostile. It was impossible to see how the interests of the three Presidency Banks and of the large Joint Stock and Exchange Banks could be reconciled with a great State Institution. Since then there has been a certain revulsion of feeling, though opinion is still nicely divided, and there are many who, whilst not hostile to a State Bank per se, are inclined to think that Government can do of more assistance in time of crisis by remaining outside banking and placing its resources at the disposal of the market through the Presidency Banks in time of pressure.

The Railways.

The history of Indian Railways very closely reflects the financial vicissitudes of the country. Not for some time after the establishment of Railways in England was their construction in India contemplated, and then to test their money available had to be diverted to converting the Sind and Punjab lines from metre to broad-gauge for strategic reasons. Government had therefore again to resort to the system of guarantee, and the Indian Midland (1882-87), since absorbed by the Great Indian Peninsula, the Bengal-Nagpur (1884-87), the Southern Maratha (1882), and the Assam-Bengal (1891) were constructed under guarantees, but on easier terms than the first companies. Their total length was over 4,000 miles in 1879, embarrassed by famine and by the fall of the exchange value of the rupee, Government again endeavoured to enlist unaided private enterprise. Four companies were promoted—the Delhi-Umballa-Kalka, the Bengal Central, and the Bengal North-Western. The first became bankrupt, the second and third received guarantees, and the fourth a step of even greater importance was taken when Native States were invited to undertake construction in their own territories, and the Nizam's Government guaranteed the interest on 330 miles of line in the State of Hyderabad. This was the first of the large system of Native State Railways. In the first period up to 1870, 425 miles were opened, of which all save 45 were on the broad gauge, during the next ten years there were opened 4,339, making the total 8,494 (on the broad gauge 6,562, the metre 1,865, and narrow 67). Then ensued a period of financial ease. It was broken by the fall in exchange and the costly lines built on the frontier. The Punjab incident, which brought Great Britain and Russia to the verge of war, necessitated the connection of our outposts at Quetta and Chaman with the main trunk lines. The sections through the desolate Harani and Bolan Passes were enormously costly. It is said that they might have been ballasted with rupees, the long tunnel under the Thok Pass added largely to this necessity, but unprofitable outlay.

Famine and Frontiers

In 1879, embarrassed by famine and by the fall of the exchange value of the rupee, Government again endeavoured to enlist unaided private enterprise. Four companies were promoted—the Delhi-Umballa-Kalka, the Bengal Central, and the Bengal North-Western. The first became bankrupt, the second and third received guarantees, and the fourth a step of even greater importance was taken when Native States were invited to undertake construction in their own territories, and the Nizam's Government guaranteed the interest on 330 miles of line in the State of Hyderabad. This was the first of the large system of Native State Railways. In the first period up to 1870, 425 miles were opened, of which all save 45 were on the broad gauge, during the next ten years there were opened 4,339, making the total 8,494 (on the broad gauge 6,562, the metre 1,865, and narrow 67). Then ensued a period of financial ease. It was broken by the fall in exchange and the costly lines built on the frontier. The Punjab incident, which brought Great Britain and Russia to the verge of war, necessitated the connection of our outposts at Quetta and Chaman with the main trunk lines. The sections through the desolate Harani and Bolan Passes were enormously costly. It is said that they might have been ballasted with rupees, the long tunnel under the Thok Pass added largely to this necessity, but unprofitable outlay.

Early Disappointments

The main principle in the formation of these companies was a Government guarantee on their capital, for this was the only condition on which investors would come forward. This guarantee was five per cent, coupled with the free grant of all the land required, in return the companies were required to share the surplus profits with the Government, after the guaranteed interest had been met, the interest charges were calculated at 22½ to the Government on fixed terms at the close of twenty-five years and the Government were to exercise close control over expenditure and working. The early results were disappointing. Whilst the Railways greatly increased the efficiency of the administration, the mobility of the troops, the trade of the country, and the movement of the population, they failed to make profits sufficient to meet the guaranteed interest. Some critics attributed this to the unnecessarily high standard of construction adopted and to the engineers' ignorance of will rolling stock designed to illustrate the carrying power of this gauge. The rebate terms being found unattractive in view of the competition of 4 per cent, trustees stocks, lakhs. Seeking for some more economical method of construction, the Government the deficit on the Railway budget was Rs 166½ lakhs. Seeking for some more economical method of construction, the Government the deficit on the Railway budget was Rs 166½ lakhs. Seeking for some more economical method of construction, the Government the deficit on the Railway budget was Rs 166½ lakhs.

Rebate Terms Established.

This induced the fourth period—the system of rebates. Instead of a gold subsidy, companies were offered a rebate on the gross earnings of the traffic interchanged with the main lines, so that the dividend might rise to four per cent, but the rebate was limited to 20 per cent. of the gross earnings. Under these conditions, there were promoted the Ahmedabad-Punjab, although only in the case of the first Punjab, the South Behar, and the Southern Railway, the terms strictly adhered to. The Barak Light Railway, on the two feet six inches gauge, entered the field without any guarantee, and carried rolling stock designed to illustrate the carrying power of this gauge. The rebate terms being found unattractive in view of the competition of 4 per cent, trustees stocks, lakhs. Seeking for some more economical method of construction, the Government the deficit on the Railway budget was Rs 166½ lakhs.

increase in the trade of India found the main lines totally unprepared. Costly works were necessary to double lines, improve the equal-ment, provide new and better yards and terminal facilities and to increase the rolling stock. Consequently the demands on the open lines have altogether overshadowed the provision of new lines. Even then the railway budget was found totally inadequate for the purpose, and a small Committee sat in London, under the chairmanship of Lord Inchcape, to consider ways and means. This Committee found that the amount which could be remuneratively spent on railway construction in India was limited only by the capacity of the money market. They fixed the annual allotment at £12,000,000 a year. Even this reduced sum cannot always be provided.

As the original contracts carried a definite Government guarantee of interest, it was necessary for Government to exercise strong supervision and control over the expenditure during construction, and over management and expenditure after the lines were open for traffic. For these purposes a staff of Consulting Engineers was formed, and a whole system of checks and counterchecks established, leading up to the Railway Branch of the Public Works Department of the Government of India. As traffic developed, the Indian Railways grew this dry nursing, and when the original contracts expired, and the interests of Government and the Companies synchronised, it became not only vexatious but unnecessary. Accordingly in 1901-02 Mr. Thomas Robertson was deputed by the Secretary of State to examine the whole question of the organisation and working of the Indian Railways, and he recommended that the existing system should be replaced by a Railway Board, consisting of a Chairman and two members with a Secretary. The Board was formally constituted in March 1903, and was originally constituted in March 1903. The Board is outside, but subordinate to the Government of India in which it is represented by the Department of Commerce and Industry. It prepares the railway programme of expenditure and considers the greater questions of policy and economy affecting all the lines. Its administrative duties include the construction of new lines by State agency, the carrying out of new works on open lines, the improvement of railway management with regard both to economy and public convenience, the arrangements for through traffic, the settlement of disputes between lines, the control and promotion of the staff on State lines, and the general supervision over the working and expenditure of the Company's lines. Two minor changes have been taken place since the constitution of the Railway Board. In 1908, to meet the complaint that the Board was subjected to excessive control by the Department of Commerce and Industry, the powers given the status of a Secretary to Government with the right of independent access to the Viceroy, he usually sits in the Imperial Legislative Council as the representative of the Railway interest. In 1912 in consequence of complaints of the excessive interference of the

Board with the Company's an informal mission was undertaken by Lord Inchcape to reconcile differences. The constitution of the Board is now undergoing further inquiry, and the development generally favoured in the establishment of a Railway Member of the Viceroy's Executive Council.

Management

The Railways managed by Companies have Boards of Directors in London. They are represented in India by an Agent, who has under him a Traffic Manager, a Chief Engineer, a Locomotive Superintendent, a Store-keeper, a Police Superintendent, (who is appointed by Government), and an Auditor. The State Railways are similarly organised.

Clearing House

Proposals have several times been made for the establishment of a Clearing House but the difficulties are too great. The work which would ordinarily be done by the Clearing House is done by the Audit Office of each Railway.

The Railway Conference

In order to facilitate the adjustment of domestic questions, the Railway Conference was instituted in 1876. This Conference was consolidated into a permanent body in 1903 under the title of the Indian Railway Conference Association. It is under the direct control of the railways, it elects a President from amongst the members, and it has done much useful work.

The Indian Gauges

The standard gauge for India is five feet six inches. When construction was started in 1870, when the State system was adopted, it was decided to find a more economical gauge, for the open lines had cost £17,000 a mile. After much deliberation, the metre gauge of 3 feet 3 inches was adopted, because at that time the idea of adopting the metric system for India was in the air. The original intention was to make the metre gauge lines provisional, they were to be converted into broad gauge as soon as the traffic justified it, consequently they were built very light. But the traffic expanded with surprising rapidity, and it was found cheaper to improve the carrying power of the metre gauge lines than to convert them to the broad gauge. So, except in the Indus Valley, where the strategic situation demanded an unbroken gauge, the metre gauge lines were improved and they become a permanent feature in the railway system. Now there is a great metre gauge system north of the Ganges connected with the Rupsputana lines and Kathiawar. Another system in Southern India embracing the Southern Maratha and the South India Systems. These are not yet connected, but the necessary link from Khandwa by way of the Nizam's Hyderabad-Godavari Railway, cannot be long delayed. All the Burma lines, and on the metre gauge. Since the opening of the Barak line, illustrating the capacity of the two feet six inch gauge, there has been developed a tendency to construct feeders on this rather than on the metre gauge.

Government Control

As the original contracts carried a definite Government guarantee of interest, it was necessary for Government to exercise strong supervision and control over the expenditure during construction, and over management and expenditure after the lines were open for traffic. For these purposes a staff of Consulting Engineers was formed, and a whole system of checks and counterchecks established, leading up to the Railway Branch of the Public Works Department of the Government of India. As traffic developed, the Indian Railways grew this dry nursing, and when the original contracts expired, and the interests of Government and the Companies synchronised, it became not only vexatious but unnecessary. Accordingly in 1901-02 Mr. Thomas Robertson was deputed by the Secretary of State to examine the whole question of the organisation and working of the Indian Railways, and he recommended that the existing system should be replaced by a Railway Board, consisting of a Chairman and two members with a Secretary. The Board was formally constituted in March 1903, and was originally constituted in March 1903. The Board is outside, but subordinate to the Government of India in which it is represented by the Department of Commerce and Industry. It prepares the railway programme of expenditure and considers the greater questions of policy and economy affecting all the lines. Its administrative duties include the construction of new lines by State agency, the carrying out of new works on open lines, the improvement of railway management with regard both to economy and public convenience, the arrangements for through traffic, the settlement of disputes between lines, the control and promotion of the staff on State lines, and the general supervision over the working and expenditure of the Company's lines. Two minor changes have been taken place since the constitution of the Railway Board. In 1908, to meet the complaint that the Board was subjected to excessive control by the Department of Commerce and Industry, the powers given the status of a Secretary to Government with the right of independent access to the Viceroy, he usually sits in the Imperial Legislative Council as the representative of the Railway interest. In 1912 in consequence of complaints of the excessive interference of the

STATISTICAL POSITION.

In the report on the administration of the Indian railways for the year 1914-15 an important departure is made. The whole history of the Indian railway system is reviewed, and the process which led to its evolution is expounded. The difference between State-owned and State-managed lines between State-owned and State-managed lines, and between private lines and those constructed under Branch Line terms is explained. This history is to be included in all subsequent reports and should be studied by those who are in need of further information in the details of the Indian system.

Capital.—The actual capital outlay (booked cost) on lines in which the State is financially interested (excluding premia for the purchase of Companies' lines) from the commencement of operations on all lines open at the close of the year 1914-15 amounted to Rs 4,61,89,79 lakhs and on lines then under construction to Rs 3,03,19 lakhs. In addition Rs 91,37 lakhs were expended on miscellaneous items. The gross earnings of all Indian railways during the year 1914-15 amounted in round figures to Rs 6,04,01 lakhs, compared with Rs 6,358,56 lakhs in 1913-14, being a decrease of Rs 3165.5 lakhs, while the working expenses were only Rs 18,84 lakhs less than in 1913-14. The net earnings amounted to Rs 2,767,91 lakhs against Rs 3,065,62 lakhs in 1913-14 or a decrease of Rs 297.71 lakhs. These net earnings yielded a return on the capital outlay (Rs 51,922.18 lakhs) on open lines, i.e., on mileage earning revenue, of 5.33 per cent, as compared with 6.19 per cent in 1913-14. The corresponding actual return per cent for the previous years is compared as follows:—

Percentage of Expenses	1905	1906	1907	1908	1909	1910	1911	1912	1913-14	1914-15
	6.07	5.06	5.86	4.33	4.81	5.46	5.87	6.77	6.19	5.33

Results of Working

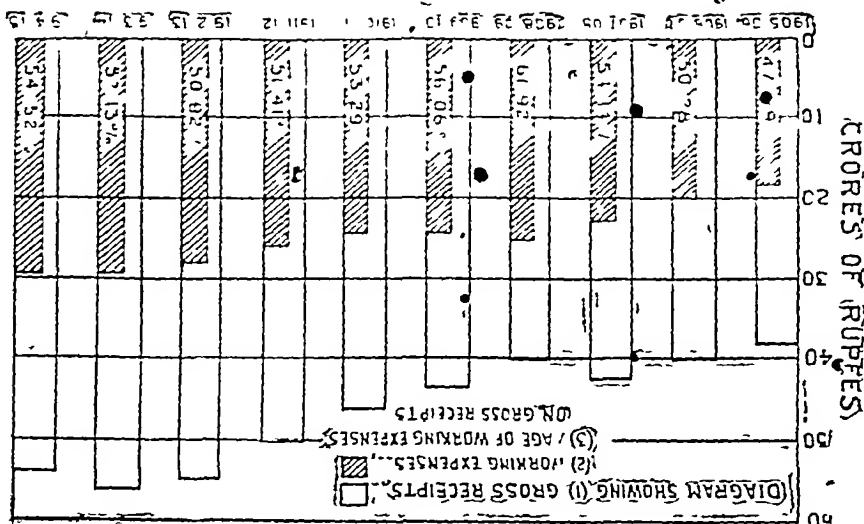
The financial result of the working of the State Railways during the year 1914-15 is a return of Rs 483 lakhs. Out of this a sum of Rs 150 lakhs (Rs 1,002 thousand) was expended in the form of annuity payments in redemption of capital.

Yield Per Cent

The gross earnings of all Indian railways during the year 1914-15 amounted in round figures to Rs 6,04,01 lakhs, compared with Rs 6,358,56 lakhs in 1913-14, being a decrease of Rs 3165.5 lakhs, while the working expenses were only Rs 18,84 lakhs less than in 1913-14. The net earnings amounted to Rs 2,767,91 lakhs against Rs 3,065,62 lakhs in 1913-14 or a decrease of Rs 297.71 lakhs. These net earnings yielded a return on the capital outlay (Rs 51,922.18 lakhs) on open lines, i.e., on mileage earning revenue, of 5.33 per cent, as compared with 6.19 per cent in 1913-14. The corresponding actual return per cent for the previous years is compared as follows:—

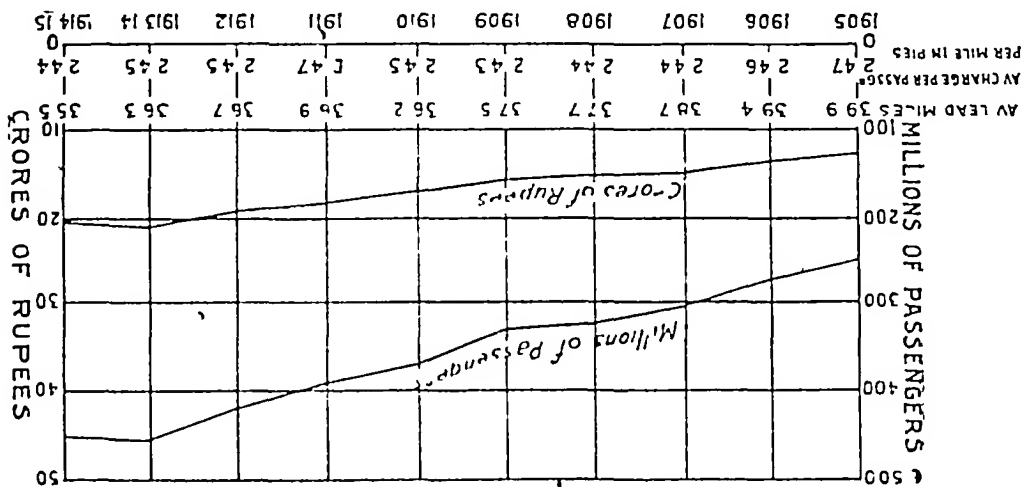
Percentage of Expenses	1905	1906	1907	1908	1909	1910	1911	1912	1913-14	1914-15
	6.07	5.06	5.86	4.33	4.81	5.46	5.87	6.77	6.19	5.33

The following diagram shows graphically the ratio of aggregate revenue expenditure to gross receipts of State lines, worked by the State and Companies, for the past ten years:—



Passenger Earnings

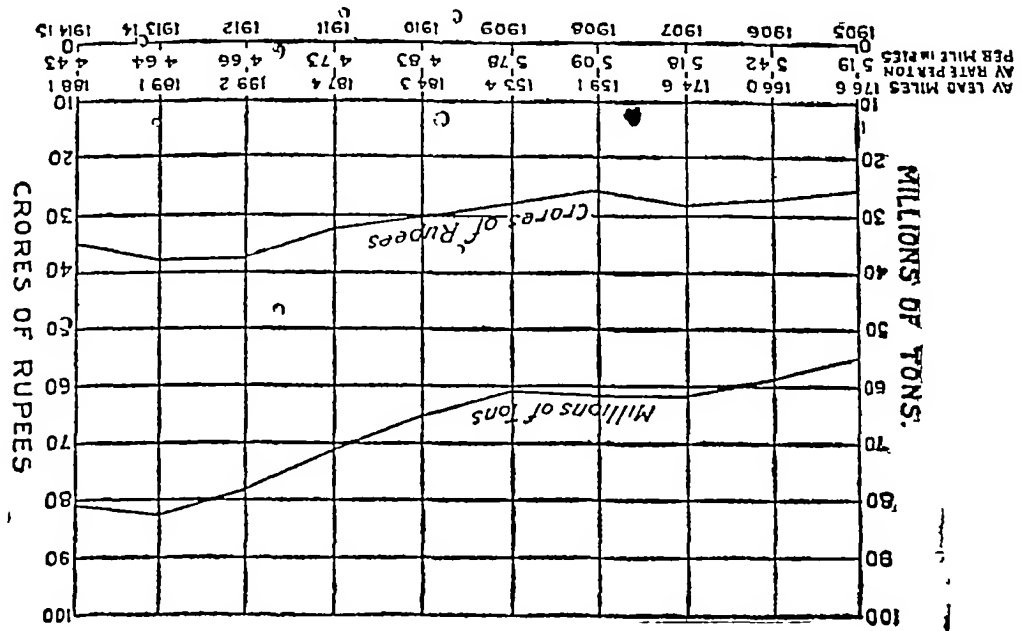
The number of passengers carried and the earnings therefrom are compared in the next diagram —



The decrease in the passenger traffic during the year under review was chiefly due to the effect of the war upon trade and to the absence of tourists and military officers from the country. But for the opening of new railways and the movement of troops consequent on the war, this decrease would have been still greater.

Goods Traffic

A similar comparison of the tonnage of, and earnings from, goods traffic is afforded by the following diagram —



The large falling off in the earnings from goods traffic, which was not accompanied by a corresponding decrease in the quantity carried, was principally due to the low-rated commodities (coal and grain and pulse) carried and to the war and famine conditions.

Mileage.—During the year 1911-12, 452.70 miles of railway were opened to traffic, bringing the total mileage operated to 11,747.17 miles. The additional mileage was made up as follows:—

[illegible]

For the second year in succession the mileage on the 7-0 gauge opened to traffic during the year of 1915, which have been complicated by Companies who have obtained concessions on rate mileage, exceeded the mileage of railways which have been financed by any other one method and have been constructed with money raised in India. The progress made during the past ten years is summarised in the following table—

to the end of the

[illegible]

Federal Railways.—As noted in the introduction, efforts have been made to secure the participation of private capital in railway construction in India under what are called the branch line terms. In 1910 more liberal terms were offered for this purpose, and private enterprise was offered two alternative forms of assistance.—

- (1) A rate paid by the parent line from its net earnings from traffic brought to it by the feeder railway, sufficient to make up 5 per cent on the paid up capital of the branch line company. The liability of the main line being, however, limited to the total of the net earnings from this traffic.
- (2) A firm guarantee from Government of a 2½ per cent return on the paid up capital. In

certain cases, when the branch line company so desires, a guarantee may be offered in respect of a portion of the capital of the Company, and a rebate in respect of the remainder. During the year ending March 1914, Rs 224 lakhs of capital were raised under the Branch line terms for the construction of 341 miles of railway, while the lines similarly financed during the year under review aggregated 377 miles and involved a total capital outlay of Rs 1,977 lakhs. Negotiations were, in addition, concluded, and concessions granted for the construction of several other branch lines.

Notwithstanding the effect which the outbreak of war has exercised on the money market, three out of the eight lines included in the

schedule were financed after its outbreak—fact which testifies to the popularity of Compamies floated under the Branch Line terms. Additional evidence of this popularity is furnished by the fact that apart from the schemes for which negotiations have actually been granted, there were under negotiation at the close of the year 1914-15 proposals for the construction of 2,376 miles of railway on the 2-6-0 gauge, 649 miles on the metre-gauge, and 570 miles on the broad-gauge, or an aggregate of 3,595 miles of railway, involving a total capital outlay of nearly twenty crores of rupees, or upwards of thirteen millions sterling.

But however attractive the Branch Line terms of 1913 may have proved in respect of the better developed provinces of India, it was recognised that in Assam, owing to the undeveloped state of the country, further inducements were necessary if private capital was to be attracted to railway projects. It was accordingly decided that special terms should be offered for the construction of railways in that province and a Resolution was issued in January 1915 which permitted the grant for a limited number of years after opening of a railway to traffic, of a provincial subsidy of 1 per cent by the Assam Administration in addition to the Imperial guarantee of 3½ per cent. The number of proposals for the construction of feeder lines in Assam, which have been put forward since the publication of this Resolution, shows that the value of this additional concession is fully appreciated by the public.

District Boards—The part taken by the District Boards of the Madras Presidency in the development of railway communications in 1884, District Boards in Madras have been empowered to levy a special cess not exceeding 3 pies per rupee of land revenue—the proceeds of this cess being reserved for the construction of feeder railways intended to develop the districts which finance and own them.

The Tanjore and Kistna District Board Railways were for some years the only examples of lines so constructed, but recently the example of those Boards have been followed in several other parts of the Presidency. During the year under review, the following lines were under construction at the cost of local funds—

- (1) Podanur-Pollachi (3-3½) by the District Board of Coimbatore, 25 miles in length and estimated to cost Rs 11½ lakhs
- (2) Tenali-Bepalli Railway (5-6½) by the District Board of Guntur, 23 miles in length and estimated at Rs 14 lakhs
- (3) Midamagalam-Almaragudi and Tiruturai-Pudurai-Vedamangalam Railways (3-3½) by the Tanjore District Board, having a combined mileage of 31½ and being estimated to cost approximately Rs 20 lakhs

For various reasons, no new District Board Railways were actually sanctioned during the year, but at its close negotiations were in progress in connection with a number of important schemes, which it was hoped would shortly materialise.

To encourage District Board enterprise in other parts of India, permission to legislate during 1913 to all Local Governments desiring to introduce such legislation, but it will probably by some years be for any of the Local Boards in these provinces have accumulated sufficient funds to commence the construction of branch railways.

Accidents—The total number of persons of all classes killed by motor boys and their control was 76 against 117 and the number of a total of 151.09 millions against 160.02 millions of passengers travelling, and of 18,000 millions of miles travelled, 16 passengers were killed and 110 injured against 58 killed and 104 injured in the previous year. This gives an average of one fatal casualty in 28.10 millions against one in 8.04 millions of persons travelling and in average of one in 1,001.13 millions against one in 286.142 millions of miles travelled in 1914-15 and 1913-14 respectively. This diminution in the number of fatalities cannot, however, be attributed to any decrease in the number of accidents. In the previous year an unusually large number of persons were killed in two accidents alone causing the death of 56 persons.

The following are particulars of the more serious train accidents—

A passenger train running through Samabhu station on the North-Western Railway, on the 20th November 1914, was pulled up by the driver in order to obtain permission to proceed to the next station. This "permit" should have been in the pouch which is picked up mechanically by the engine when a train does not stop at a station, but was missing on this occasion. After some delay caused by the Assistant Station Master making a second "permit" the train was backed and drawn up about the centre of the station, and while standing on this position was run into from behind by a mail train which was following. Three vehicles were wrecked and 8 persons killed and 25 injured by the collision.

The case was the subject of departmental enquiry as a result of which the Assistant Station Master in connection of the rules and so allowing that train to enter the station before the line on which it was to be received was clear. The Assistant Station Master was subsequently prosecuted, convicted and sentenced to 2 years imprisonment and a fine of Rs 200.

A goods train while ascending the gradient passing through a tunnel near Igatpur station on the Great Indian Peninsula Railway on the 15th October 1914, parted between the 2nd and 3rd vehicles from the leading engine and the rear portion ran back towards the reversing station where it collided with a down goods train standing outside the station, owing to the points leading to No. 3 catch siding, which is provided for such a contingency, being held over by the pointsman for the down main line, instead of being allowed to remain in their normal position for the catch

that some form of fire extinguishers be carried in the brake vans of mixed trains and that the certain of windows wells, which are left open in certain carriages in order that articles dropped into the window slot might ordinarily fall on to the floor of the carriage be closed.

The Ceylon Boat Mail collided with a goods special near Samudram station on the South Indian Railway, on the 26th May 1914. An employee of the Railway, who was travelling in the rear brake-van of the goods train, was slightly injured but the damage to rolling stock especially in the case of the goods train was considerable.

A storm the night before had blown down trees which had damaged the wires connecting the block instruments. This had necessitated the suspension of the ordinary method of working trains on the Absolute Block System and resort to the working of trains under special rules and regulations framed by the Company to meet such a contingency. Neglect by the station staff of certain precautions imposed by these regulations led to the admission into the same block section of the mail and the goods train from opposite directions simultaneously and a further neglect on the part of the driver of the goods train of precautions as to speed resulted in the collision.

In investigating the cause of the accident it was found that the rules and regulations framed by the Company for the working of trains during the failure of telegraphic communication left too much to the discretion of the staff, and it was consequently decided to revise the rules. The staff at fault were dealt with departmentally.

Early on the morning of the 20th November 1914, a "glancing" collision occurred at Korukuppel, a small station on the Madras and Southern Mahratta Railway, in the outskirts of Madras.

Two goods trains had to cross at this place. The up train arrived first and entered the loop siding. The down train was then received on the platform a line. It was a long train and was brought to a stand before the rear brake had been drawn fully clear of the points. The fact of the points being coupled appears to have escaped notice and the up train was permitted to resume its journey towards Madras with the result that the engine collided with the rear of the down train and derailed the last three wheels on it.

The Assistant Station Master who was, in a great measure, responsible for the accident, was round dead under one of the wagons. The guard or the down train, who was equally responsible, was prosecuted and sentenced to pay a fine of Rs 150, or in default, to undergo three months rigorous imprisonment.

Railway Staff—The total number of servants in railway employ at the close of the year was 600,116, of which number 7,640 were Europeans, 10,845 Anglo-Indians, and 582,131 Indians. Of the Europeans and Anglo-Indians, 15,981 were enrolled as Volunteers. At the close of 1914-15, there were 10,864 children and 10,168 apprentices and workmen attending the Railway Schools.

Killing Light Railway servants were killed and

Twenty-two injured

Two engines were working the train which was

with automatic vacuum brakes. Considerable trouble had been experienced in hauling the train up the gradient owing to the engine

down than the one in which it subsequently

parted, owing to the vacuum brake connecting

hauled by two vehicles coming up

coupled. In restarting the train the staff had

neglected to restore this connection and consequently

with the train parted in the tunnel

runder up by the passage of a downward

portion ran backward down the grade and could

not be controlled owing to the vacuum brake

having been rendered inoperative after the first

stoppage.

The staff at fault were dealt with department-

ally.

The question as to the best arrangement of

the catch siding points so as to obviate a re-

turnance of the kind is still under investigation

and up Baraboni Pilot collided with a down

stations, on the East Indian Railway, on the 5th

April 1914, resulting in the death of three rail-

ways servants including the driver who was pri-

marily responsible for the accident, and in-

juries to eight other railway servants. The

rolling stock was also considerably damaged.

The accident was due to the driver of the down

Baraboni Pilot having started with a wrong line

clear. The Assistant Station Master of Son-

chora was also responsible for the accident

as much as he failed to give proper instructions

to the train for which the line clear was in-

tended, or to ensure that his instructions were

fully understood and properly carried out, as

ruled by the rules.

The accident would have been averted, had

the Assistant Station Master sent immediate

warning to Ondal Junction cabin when he dis-

covered that the down Baraboni Pilot had left

with a wrong line clear.

The staff at fault were

departmentally punished.

On the 25th May 1914, two third class carriages

of an up mixed train caught fire between Sheshal

and Alwar stations, on the Poona Branch of the

Madras and Southern Mahratta Railway. The

THE CHIEF RAILWAYS IN INDIA.

The Assam-Bengal Railway, which is connected on the metre gauge, starts from Chittagong and runs through Burma Valley across the North Cachar Hills into Assam. It is worked under a limited guarantee by a company whose contract is terminable in 1921. The main line has an open mileage of 847.98. The total capital outlay is Rs. 1,624 lakhs, gross earnings 68 lakhs, net earnings, 17 lakhs and the percentage of net earnings on the capital outlay 1.07. The loss to the State for 1914-15 was Rs. 34,01,928.

Bengal and North-Western

The Bengal and North-Western Railway was constructed on the metre gauge system by a company without any Government assistance other than free land and was opened to traffic in 1885. The system was begun in 1874 as the Tinsukia State Railway in 1890 the line was leased by Government to the Bengal and North-Western Railway. Since then extensive additions have been made in both sections. It is connected with the Rajputana and the Oudh and Rohilkhand and with the Eastern Bengal State Railway at Khairati.

The open mileage is 2,027.12 under construction or sanction 35.08, total 2,062.20. The total capital outlay amounts to Rs. 991 lakhs, gross earnings 108 lakhs, net earnings Rs. 65 lakhs and interest divided between the Government and Company Rs. 68 lakhs, percentage of total net income on capital outlay 6.95. Tinsukia railway Total capital outlay Rs. 817 lakhs, gross earnings Rs. 95 lakhs, net earnings Rs. 58 lakhs, percentage to the State Rs. 26 lakhs, and 0.72.

Bengal-Nagpur

The Bengal-Nagpur Railway was commenced as a metre gauge from Nagpur to Chhattisgarh in the Central Provinces in 1887. A company was formed under a guarantee which took over the line, converted it to the broad gauge and extended it to Howrah, Cuttack and Ranchi. In 1901 a part of the East Coast State Railway from Cuttack to Vizagapatnam was transferred to it and in the same year sanction was given for an extension to the coal fields and for a connection with the Branch or the East Indian Railway at Bargarhpur. Open mileage 2,127.85, under construction or sanction 283.23, total 3,011.08. The total capital outlay is Rs. 4,021 lakhs, gross earnings Rs. 410 lakhs, net earnings 203 lakhs, percentage of net earnings on capital outlay is 5.05. The gain to the State is 47 lakhs.

Bombay Baroda

The Bombay, Baroda and Central India Railway is one of the original guaranteed railways. It was commenced from Surat via Baroda to Ahmedabad, but was subsequently extended to Bombay. The original contract was terminable in 1880, but the period was extended to 1905, and then renewed under revised conditions. In 1885 the Rajputana metre gauge system of State railways was leased to the Company and has since been incorporated in it. On the opening of the Nagda-Munira, giving broad gauge connection

The East Indian.

The East Indian Railway is one of the three railways sanctioned for construction as experimental lines under the old form of guarantee. The first section from Howrah to Pandua was opened in 1854 and at the time of the opening it gave the only direct access to the port of Calcutta from North-east India and is consequently fed by all the large railway systems connected with it. In 1850 the Government purchased the line, paying the shareholders by annuities, but leased it again to the company to work under a contract which is terminable in 1919. The open mileage is 2,716.46 under construction or sanction 89.67, total 2,806.13. Total capital outlay is Rs. 2,445 miles) Rs. 7,052 lakhs, gross earnings 1,055 lakhs, net earnings Rs. 625 lakhs, percentage of net earnings on capital outlay 8.87 gain to the State 236 lakhs.

Eastern Bengal

The Eastern Bengal State Railway was promoted under the original form of guarantee and was constructed on the broad gauge. The first portion of the line running to Calcutta over the Ganges was opened in 1862. In 1874 sanction was granted for the construction on the metre gauge of the Northern Bengal State Railway, which ran from the north bank of the Ganges to the foot of the Himalayas on the way to Darjeeling. These two portions of the line were amalgamated in 1884 into one State Railway. The open mileage is 1,639.05, capital total outlay 3,501 lakhs, gross earnings 332 lakhs, net earnings 114 lakhs, percentage of net earnings on capital outlay 3.28. Loss to the State 18 lakhs.

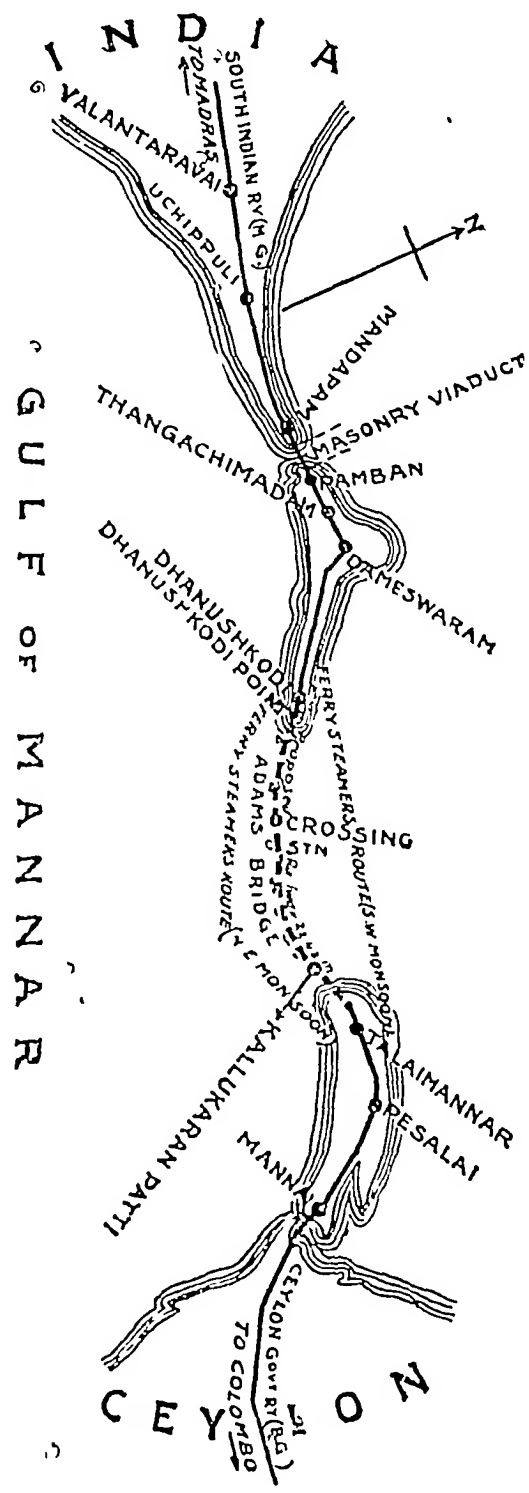
Burma Railways

The Burma Railway is an isolated line, and there is little prospect of its being connected with the Indian system of India on account of the difficult and sparsely populated country which intervenes. It was commenced as a State Railway and transferred in 1896 to a Company under a guarantee. The mileage is 1,411.85, total capital outlay Rs. 1,772 lakhs, gross earnings 210 lakhs, net earnings 94 lakhs, percentage of net earnings on the capital outlay is 5.34, gain to the State 21 lakhs. Burma extensions have a total mileage of 253.18.

Burma Railways

The metre gauge system of the Company shows a mileage of 1,815.61, total capital outlay 1,710 lakhs, gross earnings 280 lakhs, net earnings, 132 lakhs, percentage of net earnings on the capital outlay 7.7, gain to the State 75 lakhs.

PROPOSED RAILWAY FROM INDIA TO CEYLON



Arakan Yoma have to be crossed. Yoma is a mountain ridge which extends from Cape Negrais northwards until it loses itself in a mass of tangled hills east of Akkabar and Chittagong. At its southern end the height of the ridge is insignificant but it has peaks as high as 4,000 feet before it reaches the latitude of Sandway and further north it rises much higher. It is a formidable obstacle to railway communication between India and Burma. This route is estimated to cost about £7,000,000 and would have to be supplemented by branch lines to Akkabar where there is at present a considerable rice traffic and the cost of this would have to be added to the £7,000,000 already incurred to the other routes examined have been the Iukong Valley route and the Manipur route which were surveyed by the late Mr R. A. Way many years ago. The Manipur route is estimated to cost about £5,000,000 as it has to cross three main ranges of hills with summit levels of 2,450, 3,600 and 8,900 feet long. Altogether there would be about four miles of tunnelling through the three main ridges and through other hills and more than 100 miles of expensive undulating railway with grades as steep as 1 in 50 and 11,000 feet of aggregate rise and fall. The Iukong Valley route seems to be the cheapest one as it is estimated to cost £3,500,000. This line is only about 284 miles long and it presents fewer engineering difficulties than either the Coast or the Manipur route. One hundred and fifty miles of this route lie in open country only very thinly populated. Only one range of hills has to be crossed and this can be negotiated at a distance of about half a mile height of 2,500 feet. There are less than fifty miles of very heavy work and only about 4,500 ft aggregate of rise and fall.

Later in the year, when severe economies had to be practised, and it was clear that funds would not be available for the purposes of the railway, the survey parties were withdrawn.

The finding of the piles and slabs will be done by means of water jets. This case-way, it is expected, will cause the suspended sand brought up by the current, to settle on either side bringing about rapid accretion and eventually making one big island of Rameswaram Island and Manar Island. If this method of construction is adopted, it is estimated that the total cost of the causeway and works at the two terminal points, viz — Dhanshod and Talaimannar will be approximately 111 lakhs.

Indo-Burma Connection

The raids of the Uddin in the Bay of Bengal in 1914, and the temporary interruption of communications between India and Burma, stimulated the demand for a direct railway connection between India and Burma. Government accepted the position and appointed Mr Richards, M. Inst C E, to be the engineer-in-charge of the surveys to determine the best route for a railway from India to Burma. The coast route appears to be the favoured one. This would start from Chittagong, which is the terminus and head-quarters of the Assam Bengal Railway and a seaport for the produce of Assam. The route runs southwards through the Chittagong district, a land of fertile rice fields intersected by big rivers and tidal creeks and it crosses the Indo-Burma frontier, 91 miles from the town of Chittagong. For about 160 miles further it chiefly runs through the fertile rice lands of Arrakan and crosses all the big tidal rivers of the Akkabar delta. These include the Kaladan river which drains 4,700 miles of country and even at a distance of about 30 miles from its mouth is more than half a mile wide. About 260 miles from Chittagong the railway would run into the region of mangrove swamps which fringe the sea coast north and south of the harbour of Kawkaphu stretching out into the mangrove swamps like ribs from the backbone. Innumerable spurs of the

Main results of working of all Indian Railways treated as one system

Particulars	1907	1908	1909	1910	1911	1912	1913-14	1914-15
16 Goods train-miles (In thousands) Train-Miles	46,800	44,875	44,065	47,600	53,210	59,002	57,033	56,359
17 Mixed train-miles (In thousands) "	30,142	29,944	30,850	31,986	33,746	34,940	34,581	35,514
18 Total, including miscellaneous train-miles (In thousands) "	124,780	127,881	128,360	132,823	142,944	152,701	156,276	157,142
19 Unit-mileage of passengers (In thousands) Unit-miles	11,840,040	12,102,920	12,304,570	13,432,477	14,372,943	15,318,872	16,014,098	16,022,840
20 Freight ton-mileage of goods (In thousands) Ton-miles	10,840,885	9,925,830	9,310,441	12,092,916	13,328,204	15,028,505	15,623,235	15,225,057
21 Average miles a ton of goods was carried Miles	174 68	150 07	153 37	184 33	187 44	190 15	182 11	166 04
22 Average rate charged for carrying 1-ton of goods one mile Pies	5 18	5 00	5 76	4 83	4 73	4 66	4 64	4 43
<i>Average miles a passenger was carried</i>								
23 1st class Miles	100 80	100 70	103 35	90 72	111 00	106 54	112 46	123 88
24 2nd class "	70 01	71 26	69 24	75 07	76 33	74 77	74 58	80 04
25 Intermediate class "	59 20	58 82	54 80	52 41	57 27	51 00	51 13	40 72
26 3rd class "	30 65	38 65	38 74	37 12	37 72	37 81	37 40	36 50
27 Season and Vendors' tickets "	0 31	8 04	8 80	8 70	8 78	8 04	8 71	8 24
28 Total "	38 71	37 08	37 54	36 15	36 87	36 72	36 30	35 52
<i>Average rate charged per passenger</i>								
29 1st class Pies	13 06	12 05	12 80	14 55	14 20	14 25	14 48	12 79
30 2nd class "	5 76	5 70	5 04	6 07	6 73	6 04	6 60	6 28
31 Intermediate class "	3 06	3 04	3 06	3 16	3 10	3 12	3 14	3 16
32 3rd class "	2 28	2 28	2 28	2 28	2 30	2 30	2 20	2 20
33 Season and Vendors' tickets "	1 40	1 30	1 42	1 42	1 43	1 45	1 42	1 42
34 Total "	2 44	2 44	2 43	2 46	2 47	2 45	2 46	2 44

§ Mileage of Railway Lines in India open for Traffic at end of year

Railway	1901	1904	1905	1906	1907	1908	1909	1910	1911	1912
STATISTICS										
Agra Delhi Chand*	77.5	150	150	150	150	150	150	150	150	150
Assam Bengal*										
Barni Bah*										
Bengal Central	125	125	125	125	125	125	125	125	125	125
Bengal-Nagpur	1,082	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080	1,080
Bhavnagar Division*	21	21	21	21	21	21	21	21	21	21
Bhopal-Bars*	13	13	13	13	13	13	13	13	13	13
Bombay, Baroda & Central India*	504	504	504	504	504	504	504	504	504	504
Burma	1,337	1,340	1,340	1,340	1,340	1,340	1,340	1,340	1,340	1,340
Calcutta-Burhwal	80	80	80	80	80	80	80	80	80	80
Chennai-Kurnool*										
East Indian*	1,635	1,633	1,633	1,633	1,633	1,633	1,633	1,633	1,633	1,633
Eastern Bengal	877	871	871	871	871	871	871	871	871	871
Gondal-Gjandra										
Great Indian Peninsula*	1,562	1,562	1,562	1,562	1,562	1,562	1,562	1,562	1,562	1,562
Indian Midland*	505	505	505	505	505	505	505	505	505	505
Kolhapur-Bidder*	124	124	124	124	124	124	124	124	124	124
Kolkata-Provindh State	30	30	30	30	30	30	30	30	30	30
Kolkata-Gondal*	77	77	77	77	77	77	77	77	77	77
Kalka Simla	50	50	50	50	50	50	50	50	50	50
Kohat-Thal	02	02	02	02	02	02	02	02	02	02
Lucknow-Bareilly*	297	297	297	297	297	297	297	297	297	297
Madras and Southern Mahratta*	2,550	2,563	2,563	2,563	2,563	2,563	2,563	2,563	2,563	2,563
Morapur Dharmapuri*										
Mysore	296	296	296	296	296	296	296	296	296	296
Nagda-Multra*										
Nagpur Chhindwara*										
Nagpur*										
North-Western	17	17	17	17	17	17	17	17	17	17
Nowshera-Durgal	3,130	3,102	3,102	3,102	3,102	3,102	3,102	3,102	3,102	3,102
Oudh and Rohilkhand	40	40	40	40	40	40	40	40	40	40
Palampur-Deesa*	1,101	1,158	1,105	1,105	1,105	1,105	1,105	1,105	1,105	1,105
Punjab-Ranchi*	17	17	17	17	17	17	17	17	17	17
Rajput-Dhanu*										
Rajputana-Malwa*	60	60	60	60	60	60	60	60	60	60
South Indian*	1,640	1,652	1,782	1,782	1,774	1,774	1,778	1,778	1,778	1,778
Southern Siam States	1,123	1,123	1,123	1,123	1,180	1,180	1,207	1,207	1,207	1,207
Thamvelly-Cudon*										
Triploot*	60	60	60	60	60	60	60	60	60	60
Triploot-Krishnagiri*	517	535	535	535	535	535	535	535	535	535
Total	21,181	21,574	22,082	22,023	22,200	22,633	23,282	24,405	24,822	25,125

* Worked by a Company
 † Annals of the Indian Railway
 ‡ Annals of the Indian Railway
 § These are the latest figures published in 1912

† Mileage of Railway Lines in India open for Traffic at end of year—*could*

Railways	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912.
ASSISTED COMPANIES										
Ahmedabad-Dholka	33	33	33	33	33	33	33	33	33	33
Ahmedabad-Taranoli	65	65	65	65	65	65	65	65	80	80
Amreliar-Patel . . . . .	..	..	..	28	28	28	28	54	64	64
Arrah-Sasaram Light	18	18	18	18	18	18	28	28	33	33
Bakhtepur-Belhar Light . . . . .	..	..	26	26	26	26	35	51	51	61
Baraset-Basirhat Light	22	22	28	79	79	79	79	79	116	110
Barail Light . . . . .	..	..	..	..	1,015	1,017	1,002	1,117	1,176	1,177
Bengal and North Western	831	871	904	932	1,015	1,017	1,002	1,117	1,176	1,177
Benzard-Dooars	163	163	163	163	163	153	153	153	153	153
Bezwa-de-Besulpuram . . . . .	..	..	..	..	..	40	62	62	62	82
Champaner-Shivrajpur Light . . . . .	..	..	..	..	..	..	..	..	20	20
Darjeeling-Himalayan	51	51	51	51	51	51	51	51	51	51
Delhi-Umballa-Kalka	102	102	102	102	102	102	102	102	102	102
Deoghar	6	6	6	6	6	6	6	6	102	102
Dibru-Gadga	78	78	78	78	78	78	78	80	80	80
Hardwar-Dehra	32	32	32	32	32	32	32	32	32	32
Howrah-Amra	20	37	37	37	37	44	44	44	44	44
Howrah-Sheikhan . . . . .	..	20	20	20	20	20	20	20	20	20
Jalandar Doab . . . . .	..	..	..	..	..	..	..	..	..	..
Malheran . . . . .	..	..	..	..	13	13	13	13	13	13
Mirpur Khas-Jhudo . . . . .	..	..	..	..	..	..	..	..	..	..
Mymensingh-Jamshpur-Jagannathganj	63	61	61	63	74	64	64	55	55	55
Powayan Light	40	40	40	40	10	40	40	40	40	40
Rohilkhand and Kumaon	54	51	54	118	171	203	202	202	225	256
Shahdara (Delhi) Saharanpur Light . . . . .	..	..	..	..	93	93	93	93	93	93
South Behar	70	70	70	70	70	70	70	70	70	79
Southern Punjab	425	425	502	680	576	675	675	670	676	670
Subei Valley . . . . .	..	..	..	..	..	..	..	..	..	..
Tanjore Platelet Board*	90	90	90	103	103	103	103	103	103	209
Tapti Valley	165	155	165	165	165	153	165	165	165	165
Tarkesur	22	22	22	22	22	22	22	22	22	22
Tezpur-Ballpara	20	20	20	20	20	20	20	20	20	20
Zharon-Duyinzak Light	8	8	8	8	8	..	..	..	..	..
Total	2,444	2,400	2,620	2,887	3,117	3,207	3,353	3,660	3,903	4,013

Railway Mileage.

* Worked by a Company

† Amalgamated with East Indian Railway

‡ These are the latest figures published in 1915

† Mileage of Railway Lines in India open for Traffic at end of year—m.

Railways	1901	1904	1905	1906	1907	1908	1909	1910	1911	Total
UNASSISTED COMPANIES										
Delhi-Rohtas Light										
Jagadhri Light	11	0	0	0	0	0	0	0	0	11
Lezo and Pakk Warburton Colliery										
Madaya Light	31	33	34	33	33	34	32	32	31	317
Yamkeshwari Nagra Light										
Total	12	43	12	42	42	12	32	32	31	72
NATIVE STATE LINES										
Bhavnagar Gondal Junagadh-Verdandur	331	331	334	331	331	333	333	371	1531	173
Bhavnagar	44	44	44	44	44	44	44	44	44	44
Biopal Karsal*	113	113	113	113	111	113	112	113	113	113
Biopal Ujjain*	140	140	140	140	140	140	140	140	140	140
Bina-Gooma-Barnan*	38	38	38	38	38	38	38	38	38	38
Birat Sahibnaga*	31	34	33	34	34	34	34	37	37	37
Cooch-Bihar										
Cutch										
Dholpur-Bari										
Dhrangadh	21	21	21	21	21	20	20	20	20	21
Gaekwar's Dabhol*	50	55	54	54	54	54	54	54	54	54
Gaekwar's Nishama*	93	93	93	93	93	130	138	138	138	138
Gondal-Verdandur										
Gwalior Light*	127	184	184	184	184	203	250	250	250	250
Hindupur*	51	51	51	51	51	51	51	51	51	51
Hingoli Branch*										
Hyderabad Godavari Valley*	301	301	301	301	301	301	301	301	301	301
Jalpur*										
Junnu and Keshnuli	10	10	32	32	73	73	73	73	73	73
Junagar	54	54	54	54	54	54	54	54	54	54
Jetalsar-Rakhod	46	46	46	46	46	46	46	46	46	46
Jodhpur-Bikaner	700	700	700	700	700	700	776	831	910	905

* Worked by a Company

† These are the latest figures published in 1915

† Mileage of Railway Lines in India open for Traffic at end of year—concluded

Railways	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
NATIVE STATE LINES—could										
Junagad									80†	101
Khapur-Chachran*	10	10	10	10	10	10	10	10	22	22
Kolar Gold Fields*	29	29	29	29	29	29	29	29	10	10
Kolhapur*									29	29
Kosamba-Zankhva	79	79	79	79	70	70	70	79	79	79
Kudhama-Dhuri-Jakhai	04	94	94	94	94	93	93	93	93	93
Morvi									32	32
Mourbhany*										
Mysore-Nanjangud*	10	10	10	10	10	10	10	10	16	16
Nagda-Ujjain*	34	34	34	34	34	34	34	34	34	34
Nizam's*	330	330	330	330	330	330	330	330	330	330
Parakimedi Light*	25	25	25	25	25	25	25	25	25	25
Pelad-Cambay*	32	32	32	32	34	34	34	10	16	25
Pipar Road-Bahvi Light										
Rajputia*	37	37	37	37	37	37	37	37	37	37
Rajpura-Bhatinda	107	107	107	107	107	107	107	107	107	108
Sangli*									3	5
Shoranur-Cochin*	05	05	05	05	05	05	05	05	05	05
Tinnevely-Qullon	07	07	07	07	07	07	07	07	58	58
Udaipur-Chitorgarh	42	42	42	42	42	42	42	42	07	40
Vijapur-Kaloi-Kadi*										
Total	3,205	3,385	3,408	3,471	3,517	3,620	3,742	3,852	3,974	4,108
FOREIGN LINES										
Kanalkal-Dernam*	15	15	15	15	15	15	15	15	15	15
Pondicherry*	8	8	8	8	8	8	8	8	8	8
West of India Portuguese*	51	51	51	51	51	51	51	51	51	51
Total	74	74	74	74	74	74	74	74	74	74
Grand Total	20,950	27,505	28,205	29,007	30,010	30,576	31,490	32,099	32,839	33,484

* Worked by a Company.

† Formerly worked as part of the Bhavnagar-Gondal-Junagad-Forbandar Railway.
† These are the latest figures published in 1915.

-should be constructed through direct agency, and should be constructed by the State, from loan funds as productive public works

The British Inheritance,

the (trans) and ancient—the local term for barge—traveling across the width of the Cavery. In the Punjab there were a few small craftly inundations—that is above the level of the river and fed from the flood current—constructed by the Muhammadan and Sikh rulers, and owing to its proximity to Delhi, the water of the Jumna was brought to the neighbourhood of the city by the Mughals. It is doubtful if it is these ways ever irrigated any considerable area or considered much benefit to the people but they suggested the model on which the British engineers worked in South India. Sir Arthur Cotton constructed the upper ancient across the Coleroon River, so as to secure the full level required for the irrigation of the Gangetic across the Cavery. He improved it by an outlay of three acres, irrigate

[illegible]

its Early History.

[illegible]

The State Inventions

[illegible]

The Irrigation Commission.

In order to substitute policy for spasmodic effort, the Irrigation Commission was appointed by Lord Curzon's Government in 1901. It made a detailed survey of the conditions of the country, and produced the report which forms the foundation of Indian irrigation policy to day. The figures compiled by the Commission illustrate the progress which had been made up to that period. They showed that out of an area of 226 million acres annually under crop in the irrigating provinces of British India, in round numbers 44 millions acres, or 19½ per cent were ordinarily irrigated. Of the total area irrigated 18½ million acres or 42 per cent was watered by State works (canals and tanks), and 2½ million acres, or 58 per cent from private works, of which rather more than one half was from wells.

During the previous quarter of a century the area irrigated by Government works had been increased by 8 million acres, or by eighty per cent and the Commission estimated that during the same period the area under private irrigation had increased by at least three million acres or a total addition to the irrigated area in British India of 11 million acres or 33 per cent. Including the Native States the area under irrigation annually within the British Empire was placed at 53 million acres (10 million from canals, 16 million from wells, 10 million from tanks, and 8 million from other sources). The beneficial result for works of all classes are shown in the following table.—

Class of Work		Capital Outlay to end of 1900-01		Interest charges at 1 per cent on Capital Outlay		Net Revenue in 1900-01		Net Revenue less charges for interest on Lakh of Rupees	
Major Works	for which capital accounts have been kept	36,93,72	1,16,53	12,80	2,30,70	113,15	0,38	87,87	207,40
	Other Minor Works	39,83,70	150,35	300,75					
Total									

In round numbers the State irrigation works then yielded a net revenue after meeting all charges, including interest, of about two crores of rupees and irrigated annually over nineteen million acres

The Commission's Programme

The Commission reported that the field for the construction of new works of any magnitude on which the net revenue would exceed the interest charges was limited, being restricted to the Punjab, Sind and parts of Madras—tracts for the most part not liable to famine. They recommended that works of this class should be constructed as fast as possible, not only because they would be profitable investments, but also because they would increase the food supply of the country. Then addressing themselves to the question of famine protection, they worked out a very interesting equation. Taking the district of Sholapur, in the Bombay Decan, perhaps the most famine susceptible district in India, they calculated that the cost of famine relief in it was 5 lakhs of rupees a year. From this deduction, and making allowance for the advance charge of famine avoidance as compared with famine relief, they said that the State was justified in protecting the land in such a district at a cost of 221 rupees per acre. For the general protection of the Bombay Decan they recommended canals fed from storage lakes in the Ghats, where the rainfall has never been known to fall even in the driest years. For Madras they recommended the investigation of the old Tungabhadra project, and of a scheme for storage work on the Krishna. They proposed that Government should undertake the construction of protective works for the rice-growing districts of the Central Provinces and the Ken Canal project in Bundelkhand. The Commission further sketched out a rough programme of new major works to be constructed in different

The New Policy

The principal effect of the Irrigation Commission's report was to substitute policy for spasmodic effort, and the progress since made has been remarkable. The action taken on the recommendation of the Commission is thus summarised by the Government of India in their last annual review—

Punjab Triple Project.—In the year 1902 a project was submitted to the Government of India for the irrigation of the lower Bari Doab by means of a canal taking out of the Sutlej river. It was suggested to the Irrigation Commission that it would be more advantageous to carry out this work as an adjunct of a more comprehensive scheme for the irrigation of the Jech and Rechna and lower Bari Doabs. This scheme relied on the possibility of utilising

The following table shows the developments in the execution of the Ken and Dhasan canals, effected on works now in operation in the other smaller schemes. The result is that the 1908-11 The percentages of the advancements in this triennium over the figures of 1887-90 are—Capital outlay 55 irrigated area 68 net revenue 123 return on capital outlay 43 and on net profit 200

The average capital outlay for the triennium 1908-11 was £31,191,253. After meeting all the charges for maintaining and operating the works, and also all interest charges, the net profit which accrued to Government during the twenty-four years ending with 1910-11 was £53,087,833, and this more than repaid the entire capital outlay on the works in operation rivers after which they have been named, have been sanctioned. The last named has already come into operation.

Results of the New Policy

We can now turn to the results of this activity the amounts in millions of pounds sterling

Triennium	Capital Outlay	Area	Value of Crops	Direct Profit to Government	Percentage of Net Revenue on Capital Outlay
1908-11	31 40	22 10	51 71	2 28	10 76
1905-08	30 32	21 88	48 25	2 03	10 44
1899-02	28 78	20 08	43 66	1 68	9 71
1896-99	26 66	19 06	39 67	1 53	9 68
1893-96	25 01	17 55	37 40	1 53	10 09
1890-93	21 62	13 85	26 87	0 83	8 25
1887-90	20 42	13 16	24 33	0 76	7 51

The results for the last year when figures are available (1913-14) are given in a subsequent page. The following striking table shows them for the latest triennium—

Capital Outlay (Direct and Indirect) to end of Year	Gross Receipts	Working Expenses	Net Receipts	Percentage of Net Receipts on Capital Outlay	Area Irrigated
---	----------------	------------------	--------------	--	----------------

Major Works	Minor Works	Total for 1913-14	Total for 1912-13	Total for 1911-12
£41,100,185	£4,306,422	£45,496,607	£43,442,253	£41,510,000
4,409,123	344,076	4,843,799	4,543,262	4,116,000
1,338,761	151,774	1,490,535	1,449,296	1,390,000
3,160,462	192,002	3,353,204	3,093,906	2,725,000
7 09	4 39	7 37	7 12	6 6
15,242,930	1,716,566	16,959,445	16,490,160	17,099,000

These figures take no account of the indirect advantages of irrigation. They are—the produce of the country is greatly increased, the railway receipts are enhanced, famine expenditure is diminished and misery and economic disturbances reduced. Nor do they take account of the progress made in Native States, some of which, like Gwalior and Mysore, have shown conspicuous liberality.

Future of Irrigation

It is sometimes asserted, by those who take only a superficial view of Indian irrigation that we are approaching the end of the programme of productive works. There could be no greater fallacy. The scheme of great works is still vast. There is now under consideration, as explained in the section where the action taken on the Commission's recommendations is summarised, a project for the improvement of irrigation in Sind, by the construction of a weir at Sukker and the digging of a series of canals, the substitution of perennial for inundation canals, and how instead of 11½ millions the cost of this is estimated at Rs 781 lakhs (£5.21 millions). This scheme is estimated to confer

[illegible]

WELLS AND TANKS.

Irrigation Dues

Registration Dates

The first of these is the fact that the
 Government has been unable to
 raise the necessary funds to
 finance the war. This has
 been due to a number of
 factors, including the fact that
 the Government has been
 unable to raise the necessary
 funds to finance the war.

Economic Changes

[illegible][illegible]

Varities of Wells

7. Երկրորդ հարցը վերաբերում է Երևանի քաղաքի և շրջակայի բնակիչների համար անհրաժեշտ է արագորեն կառուցել մեծ թվով հիմնականում բնակարանային բնակավայրեր, որոնցում կառուցվելու են բնակարանները, որոնք կհամապատասխանեն բնակիչների պահանջներին, որոնք կհամապատասխանեն բնակիչների պահանջներին, որոնք կհամապատասխանեն բնակիչների պահանջներին:

now engaging the attention of the Government of Eastern Bengal. This is a question which is of great importance for the people of the province, and it is one which is being considered by the Government of India. The Government of India is now considering the question of the construction of a canal to connect the Ganges and the Brahmaputra. This canal is to be constructed in the district of Dacca, and it is to be a canal of great importance for the people of the province. The Government of India is now considering the question of the construction of a canal to connect the Ganges and the Brahmaputra. This canal is to be constructed in the district of Dacca, and it is to be a canal of great importance for the people of the province.

Canals and Navigation

The principal crops of the Bombay Deccan are cotton, sugarcane, and on other parts of the Western coast the rice and sugarcane. The principal crops of the Bombay Deccan are cotton, sugarcane, and on other parts of the Western coast the rice and sugarcane. The principal crops of the Bombay Deccan are cotton, sugarcane, and on other parts of the Western coast the rice and sugarcane.

periods, the term generally being long enough to recoup the owner if the capital sunk

Next to the well, the indigenous instrument of irrigation is the tank. The village or the roadside tank is one of the most conspicuous features in the Indian scene. The Indian tank may be any size, it may vary from a great work like Lakes of the Puryar Lake in Bombay Presidency or the Puryar Lake in Travancore, holding up from four to seven billion cubic feet of water, and spreading their waters through great chains of canals, to the little village tank irrigating ten acres. The due back to a very stage in Indian civilisation. Some of these works in Madras are of great size, holding from three to four billion cubic feet, with water spreads of nine miles. The inspections go to very large tanks in the Chingleput district of Madras, which still irrigate from two to four thousand acres as did to be over 1,000 years old. Tank irrigation is practically unknown in the Punjab and in Sind, but it is found in some form or other in all other provinces, including Burma, and it is highly developed in Madras. In the Ryotwari tracts of Bombay and Madras all but the smallest tanks are controlled by Government. In the State works according to the latest figures the area irrigated from tanks is about eight million acres, but in many cases the supply is extremely precarious. So far from tanks being a relief to the rural population, inasmuch as the rainfall does not suffice to irrigate them and they remain dry throughout the year. The value of the crops raised on the irrigated lands in India in 1913-14 was Rs 18 crores.

CANAL COLONIES.

The canal colonies represent the extreme case of improvement in agricultural conditions effected by irrigation in the Punjab uplands now watered by the Lower Chenab and Lower Jhelum Canals, irrigation has completely altered the face of the country, so that it supports in unparalleled prosperity a population numbering a hundred for every one of its former poverty-stricken denizens, while land once refused as a gift sells with ease at £15 an acre. The largest of the canal colonies, the Chenab Colony, on the Lower Chenab Canal, lies in the Bechna Doab, between the Chenab and Ravi Rivers, and has a total area of some 8,900 square miles. This area was until 1892 sparsely inhabited by nomad pastoral tribes, whose total number were estimated at less than 70,000. Cultivation was rendered possible only by the construction of the Chenab Canal. As far as the canal and its distributaries were constructed, the land (which was watered and owned by Government) was allotted to various classes of grantees, the bulk of the grants being made to immigrant peasants, including men from the best agricultural districts in the Province. Since its foundation the colony has enjoyed remarkable prosperity. The number of grantees to whom a large portion of the land was allotted, though without any previous knowledge of agriculture, assimilated the practices of their new neighbours with extraordinary success, and the whole colony is now as well cultivated as almost any part of India. The work of colonisation began in 1892, by 1901 the population had increased to over 791,000 and at the end of 1901-02 some 2,470 square miles out of a total allottable area of about 2,660 square miles had been allotted. In September 1912 the allottable area was returned at 3,040 square miles, and the area actually allotted at 2,870 square miles, while the total population had risen to over 1,111,000. The export of wheat from the Lyallpur district in the last year of the decade reached the total of 150,000 tons. The Jhelum Canal Colony, on the Lower Jhelum Canal, occupies some 900 square miles of State land in the Shahrpur District, and is a more recent development. Colonisation began in 1902, and was conducted on lines similar to those adopted in the Chenab Colony, but a large proportion of the grants were made on the condition that a suitable mare should be maintained for breeding purposes. Between 1906, when an informal census was taken, and 1911 the population of the colony proper increased from 73,734 to 161,806. Up to September 1912 some 630 square miles had been allotted out of an allottable area of about 780 square miles. The Chumam Colony, on the Bari Doab Canal in the Lahore District, is much smaller colony.

On October 13th, 1915, the Government of India issued, in a more complete form than hitherto been available, a summary of their colonization policy, which is of special interest in relation to the provision of land for ex-soldiers in the course of this they said —

Land for Soldiers.

Of the remaining 10,000 rectangles 7,000 will constitute the horse and mule-breeding grants. For these the holders of the 17,000 rectangles mentioned above will compete. The land will be given out on ten years' leases on condition that the tenant of each rectangle maintains a mare. A large proportion of the competitors will be military men. The strong military element among the colonists should go a long way to ensure the success of this part of the scheme. A cavalry man, especially, should make first rate breeder. The soldier, or the military man, will be selected by the authorities, after the war, and will probably be for the most part retired officers and non-commissioned officers.

There are only about 78,000 acres of Government land irrigated by the Upper Chenab Canal and of this 12,000 acres will receive perennial irrigation, whilst the remainder will be irrigated for the kharif harvest only. On the Upper Chenab Canal and on the Upper Jhelum Canal no more than 10,000 acres is available for colonization. Out of this provision has been made up to a maximum of 15,000 acres for reward grants to persons in the Rawalpindi division who rendered assistance to the criminal administration, 5,000 acres are to be given as compensation grants and another 8,000 acres 6,000 acres have been provided for tenants now holding land on the Lower Jhelum Canal, whom it desired to remove in order to allow for the extension of certain regimental horse runs. 1,000 acres are desired for special reward grants to military officers, and the balance will provide for grazing grounds and miscellaneous requirements.

The old canals left unirrigated the upper portions of the Jech and the Rechna Doabs and the lower parts of the Bari Doab. The canals of the triple project—the upper Jhelum, the upper Chenab and the lower Bari Doab canals—will bring water to much of the land in the hitherto unwatered portions of these three Doabs. The first and second of the canals, though they will irrigate some 150,000 and 650,000 acres, respectively, give little scope for schemes of colonization as the areas of the Government waste included within the limits of irrigation are comparatively speaking small. On the lower Bari Doab canal, however, the area available for colonization is something like 1,200,000 acres. The bulk of the land, about 750,000 acres (or 30,000 rectangles of 25 acres apiece) is to be given out on terms which will encourage the breeding of horses and mules. No conditions in regard to horse and mule-breeding will attach to the tenure of these rectangles, but the grantees will be eligible for extra rectangles to which such condition apply. Of these 17,000 rectangles about 7,000 have been set apart for ex-soldiers and for the rest selections have already been made from the peasants of districts lying west of the Sutlej.

Projects under investigation

Province	Name and probable classification of work	Estimated cost of project in lakhs of rupees	Estimated cost in rupees	Duration of project	Location of project	Crops and other uses
Madras	Canary reservoir project	70	47,000	1 year	Canary	For irrigation
	Madras reservoir project	600	7,000	1 year	Madras	For irrigation
	Lower Mysore project	100	10,000	1 year	Lower Mysore	For irrigation
	Hydroelectric project	25	1,000	1 year	Hydroelectric	For electricity
Bombay	12 smaller schemes	11	1,000	1 year	12 smaller schemes	For irrigation
	Golkar canal extension project	150	15,000	1 year	Golkar canal	For irrigation
	Mulshi Right Bank canal extension	170	17,000	1 year	Mulshi Right Bank	For irrigation
Sind	Right Bank canal from the tail water of the Bombay Hydro Electric scheme	27	1,000	1 year	Right Bank	For irrigation
	Robert canal, Sukkur Barrage and widening of Sir Creek (Nara supply channel)	700	2,500,000	1 year	Robert canal, Sukkur Barrage	For irrigation
Bengal	Sutanuwah, Begor canal	10	177,700	1 year	Sutanuwah, Begor	For irrigation
Bihar and Orissa	Damodar canal	10	150,000	1 year	Damodar	For irrigation
	Extension of the Tribeni canal	16	50,000	1 year	Extension of the Tribeni	For irrigation
United Provinces	Karamnasa project	7	20,000	1 year	Karamnasa	For irrigation
	Betan canal	15	30,500	1 year	Betan	For irrigation

Projects			irrigable area in acres		Districts benefited	Principal crops that will be produced
Province	Name and probable classification of work	Cost in lakhs of rupees				
United Provinces and Punjab	Sarda-Ganges, J u m n a - feeders projects	616	1,524,000	<p><i>In the United Provinces—</i> Rampur State, Pilibhit, Shahjahanpur, Hardoi, Bareilly, Moradabad, Budaula, Saharanpur, Muzaffarnagar, Meerut, Bulandshahr, Aligarh, Mathura, Agra, Etah, Jhansi, Etawah, Cawnpore, Fatehpore and Allahabad</p> <p><i>In the Punjab—</i> Gurgaon, Karnal, Delhi, Rohtak, Hissar, Patiala, and Third States Pilibhit Shikhar, P n T, Jhark, Bareilly, Hardoi, Lucknow and Unao Lahore, Ferozpur, Montgomery, Multan, Bikaner and Bahawalpur States Ferozshah</p>		
Alternative						
United Provinces	Sarda-Elchna Feeder and Sarda canal for Orda	Do	3.0	745,300		Do
Punjab	Sutlej Valley project	Do	875	3,000,000		Wheat, gram, jowar and cotton
Burma	Remodeling the Kunda canal	Do	15	85,000		Do
Central Provinces	Pangol Nalla tank project	Protective	16	33,000		Do
Baluchistan	Deena Nadi Tank project	Do	11 to 25	47,260		Wheat and barley
	Anamher reservoir project	Productive	32	80,000		Wheat, barley and jowar
	Toral reservoir project	Do	18	44,000		Wheat, barley and jowar
	Gamboli reservoir project	Do	60	218,000		Wheat and barley
	Zhob project	Do	63	209,000		Wheat, barley and jowar
	Barshore reservoir project	Do	16		Supplementary to Khush-dih tank	Wheat and barley
	Total		4,830 to 4,657	9,441,424 to 10,220,124	Quetta Peshawar	

Buildings and Roads

The Buildings and Roads branch of the Public Works Department embraces all the operations of the Department which are not classified under the special heads of Railways and Irrigation. It includes the extension and maintenance of the road system, the construction and repair of all the buildings required for the proper discharge of the functions of Government in all its branches, and a large miscellaneous class of works of public improvement, including lighthouses, harbours, embankments, boat bridges, and ferries, and the water supply and sanitation of towns.

The operations of this branch of the Department are classed primarily under the head of Civil Works, the expenditure on which is chiefly met from provincial resources. The classification of this expenditure for 1913-14 under the various heads is shown in the following table:—

	Central Pro- vinces and Berar	Burma	Assam	Bengal	Bihar and Orissa	United Pro- vinces of Agra and Oudh	Punjab	North- West Frontier Pro- vince	Madras	Bombay	India General	Total
Imperial*	£ 77,724	£ 21,271	£ 2,805	£ 110,420	£ 13,848	£ 70,214	£ 41,037	£ 218,934	£ 31,056	£ 56,087	£ 256,705	£ 910,312
Provincial*	458,010	674,107	441,162	681,244	554,917	600,262	640,300		1,090,315	791,508		6,049,824
Total	535,734	695,378	443,967	791,679	568,765	670,476	657,937	218,934	1,130,371	850,285	256,705	6,860,136
* Includes expenditure by the Civil Department in addition to that by the Public Works Department												£ 47,304
												£ 101,184
† Expenditure by Civil Officers from Imperial Funds												£ 7,008,024
‡ Expenditure in England												
Grand Total												£ 7,008,024

The extension of local Government in India has thrown a large portion of the smaller class of public works into the hands of the local boards. Speaking generally, the boards maintain their own establishments, but in the case of any works of unusual difficulty they have recourse to the professional skill of the Public Works Officers.

Posts and Telegraphs.

POST OFFICE.

The control of the Posts and Telegraphs of India is vested in an officer designated Principal Secretary to the Government, who works in subordination to the Government of India in the Department of Commerce and Industry. The superior staff of the Director-General himself consists on the postal side of two Deputy Directors-General (who are officers of the rank of General (whose status is similar to that of Postmaster-General)), four Assistant Directors-General (whose status is similar to that of Deputy Postmaster-General), and two Personal Assistants (who are selected from the staff of Superintendents).

For postal purposes, the Indian Empire is divided into eight circles as shown below, each in charge of a Postmaster-General—Bengal, Central, Madras, Punjab and North-West Frontier and United Provinces. The Central Circle comprises roughly the Central Provinces and the Central India and Rajputana Agencies. The Postmaster-General are responsible to the Director-General for the whole of the postal arrangements in their respective circles, with the exception of those connected with the conveyance of mails by railways and inland steamers which are entrusted to four officers bearing the designation of Inspector-General of Railway Mail Service and Sorting. All the Postmaster-Generals are provided with Personal Assistants, while those in charge of the largest circles are also assisted by Deputy Postmaster-Generals. The eight Postal Circles and the jurisdictions of the four Inspectors-General are divided into Divisions each in charge of a Superintendent, and each Superintendent is assisted by a certain number of officials styled Inspectors or Assistant Superintendents.

Generally there is a head Post Office at the head-quarters of each revenue district and other post offices in the same district, are usually subordinate to the head office for purposes of accounts. The Postmasters of the Central, Bombay, and Madras General Post Offices are directly under the Postmaster-General and the least of them exercises the same powers as a Superintendent of Post Offices in respect of inspections, appointments, leave and punishment.

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Letters		When the postage is prepaid	When the postage is wholly unpaid.	When the postage is insufficiently prepaid.
Not exceeding 1 tola	Exceeding 1 tola but not exceeding 10 tolas	Every additional 10 tolas or part of that weight	Every 10 tolas or part of that weight	Double the deficit-ency (chargeable on delivery)
Exceeding 1 tola but not exceeding 10 tolas	Every additional 10 tolas or part of that weight	Every 10 tolas or part of that weight	Double the deficit-ency (chargeable on delivery)	Double the deficit-ency (chargeable on delivery)

Inland Tariff is as follows —

In accordance with an arrangement which has been in force since 1883, a large number of sub-post offices and a few head offices perform telegraph work in addition to their postal work and are known by the name of combined offices. The policy is to increase telegraph facilities everywhere and especially in towns by opening a number of cheap telegraph offices working under the control of the Post Office. The telegraph expenditure on account of these combined offices is borne by the Telegraph Department to which the whole of their telegraph revenue is also credited.

Growth of the Post Office—At the end of 1894-95 the total number of Post Offices was 1,20,171 and the total length of mail lines 1,20,171 miles. For the 31st March 1915 the corresponding figures were 19,158 and 156,073. During the year 1894-95 the total number of letters, postcards, newspapers and packets given out for delivery was about 302 millions, while for the year 1914-15 the total number of unregistered articles of the same classes given out for delivery was the issue number of registered letters and packets posted amounted to over 1,030 millions. The number of parcel mail articles given out for delivery in the former year was about 2½ millions, as compared with over 12½ millions of such articles posted during the latter year. The total number and value of money orders issued increased from 9,670,937 and Rs 20,58,10,971 in 1894-95 to 30,25,382 and Rs 60,70,0410 respectively in 1914-15. During the former year the number of articles insured for transmission by post was 2,70,276 with an aggregate declared value of Rs 8,20,67,600 and the corresponding figures for 1910-11 were 1,10,428 and Rs 29,88,78,925. As the result, however, mainly of the introduction

TELEGRAPH DEPARTMENT.

tion in 1911-12 of the rule under which inland articles containing currency notes or portions thereof must be insured, the figures for 1914-15 stand at 2,000,005 and Rs 74,30,55,762. The number of accounts open on the books of the Post Office Savings Bank grew from 61,947 on the 31st March 1895 to 1,01,10,71 at the end of 1914-15 with an increase from Rs 8,10,17,027 to Rs 14,80,00,323 in the total amount standing at the credit of depositors. The total staff of the department on the 31st March 1915 numbered 55,113. The net financial result of the working of the Post Office for the year 1914-15 was a surplus of Rs 24,66,705. This account of the activities of the Post Office would not be complete if it were not mentioned that on the 31st March 1915 there were 25,348 active Postal Life Insurance Policies with an aggregate assurance of Rs 3,50,48,952 and that during the year 1914-15 it disbursed a sum of Rs 31,05,381 to Native Military Pensioners, collected, at its own expense, a sum of Rs 7,01,881 on account of customs duty on parcels and letters from abroad, and sold 11,812 lb of guano to the public.

Telegraphs—Up to 1912 the telegraph system in India was administered as a separate Department by an officer designated Director General of Telegraphs who worked directly under the Government of India in the Department of Commerce and Industry. In that year it was decided to vest the control of Posts and Telegraphs in a single officer as an experimental measure with a view to the eventual amalgamation of the two Departments. In pursuance of this policy an experimental amalgamation of the two services was introduced in the Bombay and Central Circles from the 1st July 1912. The fundamental principle of this scheme which follows closely the system in force in the United Kingdom and several other European countries are that the traffic and engineering work of the Telegraph Department should be separated, the former branch of work in each Circle being transferred to the Postmaster General who is assisted by a Deputy Postmaster General and a suitable number of attached officers while the engineering branch is controlled by a Director of Telegraphs in charge of the two Circles. Subordinate to this officer there are several Divisional Superintendents who are assisted by a number of attached officers. In 1914 the complete amalgamation of the two Departments was sanctioned by the Secretary of State and introduced from 1st April. The superior staff of the direction in addition to the Director-General himself consist on the engineering side of a Chief Engineer, Telegraphs, an Assistant and a Personal Assistant to the Director-General. For traffic work there is a Deputy Director-General with an Assistant and an Assistant Director-General. In the Circles each in charge of a Director of Telegraphs follows closely on the lines of the experimental scheme which has been introduced. For telegraph engineering one referred to above. For telegraph engineering purposes India is divided up into three Circles each in charge of a Director of Telegraphs. For Burma special arrangements were con-

Inland Tariff—The tariff for inland telegrams is as follows—
Private and State
 Daily-Ordinary Press Rates as a minimum charge 1 0 0
 Each additional word 0 2 0
 Additional charges 0 2 0
 Address charged for 0 3 0
 Acknowledgment of receipt 6 annas
 Multiple telegrams, each 100 words 4
 One quarter of charge for telegrams 11
 If both the offices of origin and destination are closed, only one of the offices is closed 1

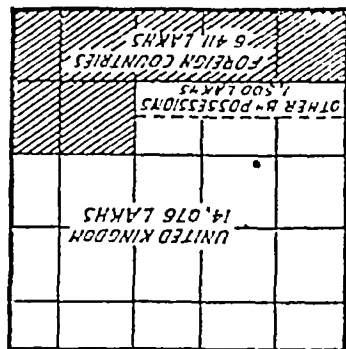
For acceptance of Express telegrams during the hours when an office is closed
 For acceptance of Express telegrams during the hours when an office is closed
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Distribution of trade of British India between British Possessions and Foreign Countries in 1914-15, as compared with the year 1913-14

It is to be noted that the share of the U

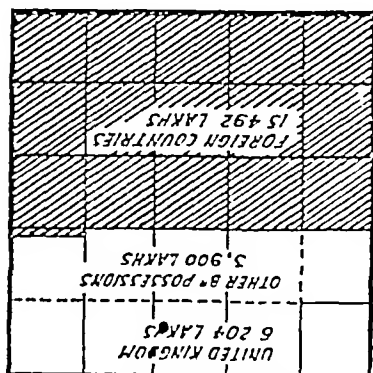
1913-14

Total Imports 24,987 lakhs



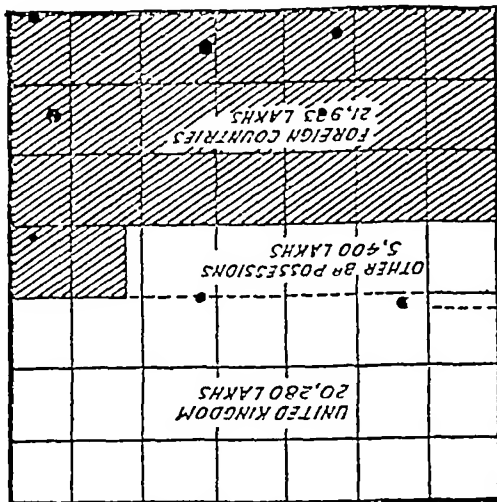
United Kingdom 56.4 per cent
Other British Possessions 18.0 per cent
Foreign Countries 25.6 per cent

Total Exports 27,790 lakhs



United Kingdom 22.3 per cent
Other British Possessions 14.0 per cent
Foreign Countries 56.4 per cent

Total Trade 47,587 lakhs

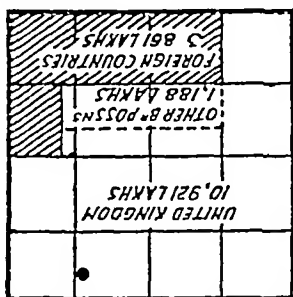


United Kingdom 46.1 per cent
Other British Possessions 11.3 per cent
Foreign Countries 42.6 per cent

Note.—Total trade includes private merchandise and treasure on private

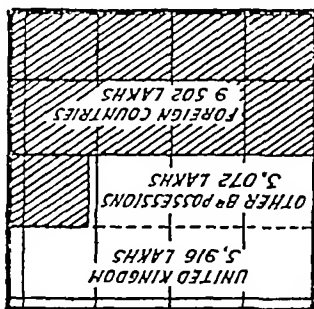
1914-15

Total Imports 13,970 lakhs



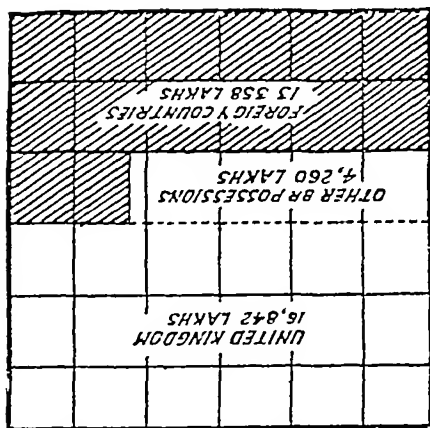
United Kingdom 78.2 per cent
Other British Possessions 8.5 per cent
Foreign Countries 42.3 per cent

Total Exports 18,190 lakhs



United Kingdom 52.5 per cent
Other British Possessions 17.0 per cent
Foreign Countries 32.5 per cent

Total Trade 31,160 lakhs



United Kingdom 54.0 per cent
Other British Possessions 13.7 per cent
Foreign Countries 54.0 per cent

Balance of Trade.

in price, and the price of coffee was lower than in 1913-14

	Percentage 1913-14 with base 1911-12	Relative Share Percent	Rs (lakh)	1911-12	Total
I Food, Drink and Tobacco			18.97	27.6	15.77
II Raw Materials			80.07	15.1	12.39
III Manufactured Articles			16.38	26.5	8.01
IV Miscellaneous			1.86	1	.55
			177.88	100	66.72
					27.3

Re-exports—The re-export trade which is comparatively unimportant with a total value of Rs 41 crores, declined, although not in the same proportion as the import and export trade. The trade is carried on chiefly through the ports of Bombay and Karachi, which continue to act as receiving and distributing centres between Europe on the one hand and the Persian Gulf and the East Coast of Africa on the other. The articles of trade are mostly manufactured goods, the most important class being cotton goods, of which the value declined from Rs 1.56 lakhs to Rs 87 lakhs on account of smaller exports to Aden, Arabia, Britain and Ceylon. This decline was partly made good by sugar which accounted for an increase of Rs 80 lakhs sent to the United Kingdom, Persia, and East African Protectorate. Raw wool imported over the land frontier maintained itself with a slightly higher range of prices.

Calculated Values—The value of part of the trade in the year under review was inflated by increased prices. In order to examine, therefore, recent with previous trade, it is necessary to eliminate the effect of the variation of prices by the method that is universally employed for this problem. It will be sufficient to show here how the 1911-12 figures appear to stand in relation to the prices of 1913-14. The calculated values in short run prices had prices value of the trade would have been, had prices remained the same as in 1913-14. The difference between the calculated values and the actual values recorded in 1911-12 shows the change in prices. Under imports the decline of Rs 45.32 lakhs is made up of a decline of Rs 40.02 lakhs or 25 per cent due to a decrease in the volume of trade set off by an increase of Rs 70 lakhs or 5 per cent due to a rise in prices. Similarly in exports the fall of Rs 66.72 lakhs is due to a decrease of Rs 49.35 lakhs or 20 per cent in the volume of trade and of Rs 17.37 lakhs or 9 per cent in prices. Taking the imports and exports together the total recorded decrease is Rs 1,12,01 lakhs of which Rs 93.37 lakhs or 22 per cent was due to the smaller volume of trade and Rs 18.67 lakhs or 5 per cent to lower prices. In short prices were 5 per cent lower than those of 1913-14, and the volume of imports and exports fell by 22 per cent.

Balance of Trade—The excess of exports over imports, of merchandise and treasure, in 1911-12 was Rs 20,72 lakhs (Rs 13 millions) including Government transactions and Rs 25,20 lakhs (Rs 16 millions) excluding Government transactions. The average for the past three years is Rs 23,48 lakhs (Rs 15 millions) and Rs 34,07 lakhs (Rs 22 millions) respectively. The following tables show the net figures of merchandise and treasure, excluding Government transactions, for the years 1910-11 to 1914-15—

	Net exports of Merchandise Rs (lakh)	Net imports of Treasure Rs (lakh)	Total Net export Rs (lakh)
1910-11	80,53	32,54	47,99
1911-12	89,28	43,06	46,22
1912-13	85,09	46,15	40,94
1913-14	65,53	29,56	36,07
1914-15	43,06	18,46	25,20

DIRECTION OF INDIAN TRADE.

[illegible][illegible]

The following table shows the value of the United Kingdom's exports to the United States, Japan, and Germany, in the years 1914-15, 1915-16, and 1916-17, in millions of pounds sterling. The figures are given in millions of pounds sterling, and are rounded to the nearest million. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column.

Year	United States	Japan	Germany
1914-15	1,000	1,000	1,000
1915-16	1,000	1,000	1,000
1916-17	1,000	1,000	1,000

The following table shows the value of the United Kingdom's imports from the United States, Japan, and Germany, in the years 1914-15, 1915-16, and 1916-17, in millions of pounds sterling. The figures are given in millions of pounds sterling, and are rounded to the nearest million. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column.

Year	United States	Japan	Germany
1914-15	1,000	1,000	1,000
1915-16	1,000	1,000	1,000
1916-17	1,000	1,000	1,000

The following table shows the value of the United Kingdom's exports to the United States, Japan, and Germany, in the years 1914-15, 1915-16, and 1916-17, in millions of pounds sterling. The figures are given in millions of pounds sterling, and are rounded to the nearest million. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column.

Year	United States	Japan	Germany
1914-15	1,000	1,000	1,000
1915-16	1,000	1,000	1,000
1916-17	1,000	1,000	1,000

The following table shows the value of the United Kingdom's imports from the United States, Japan, and Germany, in the years 1914-15, 1915-16, and 1916-17, in millions of pounds sterling. The figures are given in millions of pounds sterling, and are rounded to the nearest million. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column. The figures for 1914-15 are given in the first column, for 1915-16 in the second column, and for 1916-17 in the third column.

Year	United States	Japan	Germany
1914-15	1,000	1,000	1,000
1915-16	1,000	1,000	1,000
1916-17	1,000	1,000	1,000

Spain by 7 per cent in imports and by 11 per cent in exports and with the United States of America by 2 per cent in imports and by 20 per cent in exports.

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Total		BANKY COUNTRIES—		Germany		Austria-Hungary		Turkey		Total		NEUTRALS		GRAND TOTAL		Foreign (Sea-borne trade)															
1,02,33	96,13	1,98,18	1,31	57	1,21	22	2	79	—29,91	—34,01	4,65	10	20	14,83	12	66	20	12	30,08	14,30	10,01	14,30	—8,01	—16,22	—24,23	—8,48	—1,34	—24,23	—19,23	—45,32	—1,12,61

Trade with Foreign Countries

The chief competitor in the import trade was undoubtedly Germany, which for years has made a bold bid for the Indian market. Her exports, such as cotton manufactures, iron and steel, hardware, etc., have been serious competitors with British goods of a similar kind, while her imports from India such as raw jute and cotton seeds, hides and rice have been taken in large quantities as the raw material for German industries. Austria-Hungary sent sugar and glassware, and took in return raw jute, cotton, hides and skins. The United States and Japan, especially the latter, were seizing the opportunity to develop their trade on the part of the

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FRONTIER TRADE.

The principal exports of Afghanistan are wool, carpets, and dried fruits and nuts. The principal imports are foodstuffs, clothing, and machinery. The principal trading partners are the Soviet Union, Iran, Pakistan, and India. The principal mode of transport is by road, with a significant amount of trade also carried out by air and rail.

(In lakhs of rupees)

1913-14			1914-15		
Exports	Imports	Total	Exports	Imports	Total
N W Frontier—					
Alghanistan	1,52	1,29	1,36	1,21	2,57
Dir, Swat and Bajaur	87	78	80	75	1,55
Central Asia	18	12	15	9	24
Persia	22	3	16	3	19
N and N-E Frontier—					
Nepal	2,03	4,33	1,91	3,85	5,76
Tibet	20	33	18	35	53
Sikkim	16	31	16	29	45
Bhutan	18	21	18	22	40
Eastern Frontier—					
Shan States	1,83	2,02	2,18	1,93	4,11
IV China	56	29	53	19	72
Siam	17	44	17	40	60
Karennee (North Ten-asserim)	6	35	41	24	27

(a) Trade per head of Population in selected Countries

—	Population in millions	1900	1905	1910	1911	1912	1913	1914
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(a) Trade per head of Population in selected Countries

	India	Russia	United Kingdom	France	Germany	Italy	United States	Japan	China
—10	315	104	45	40	65	35	02	50	400
—20	6 1	16 0	273 12	135 14	135 12	56 6	90 6	17 7	2 2
—30	8 8	18 0	285 2	147 10	156 6	68 4	05 14	26 9	3 13
—40	10 11	21 7	335 10	202 8	186 6	91 15	110 9	28 8	1 1
—50	11 6	21 3	311 10	211 8	200 13	95 11	119 9	28 8	4 4
—60	12 8	23 1	367 15	226 0	219 12	105 10	156 10	33 9	4 13
—70	13 3	21 10	386 2	232 3	230 11	108 5	136 3	39 7	5 8
—80	11 13	17 6	376 0	167 10	(b)	87 7	131 2	36 3	4 11
—90					(b)				—15

(a) Figures are for the calendar year

The share of the per head of population in India is 3 per cent of that of the United Kingdom, 7 per cent of France, and 9 per cent of the United States of America. In view of the effect 'war on trade, the decrease per head of population as compared with the previous year is noteworthy. It will be seen from the table above that the decrease in the case of India in the calendar year 1914 is only 10 per cent.

Trade by Provinces.—Bengal has a much larger export and import business than Bombay, the trade of Bombay and Sind being almost equal to that of Bengal as regards imports but less as regards exports. Bengal does most of the trade with Europe, America and Australia, while Bombay does the greater part of the trade with Asia, the shares of the other provinces being as follows—Bombay 19 per cent, Madras 12 per cent, Burma 10 per cent, and Sind 9 per cent.

	Import Rs. (lacs)	Export Rs. (lacs)	Total Rs. (lacs)	Share per cent
Bengal and Orissa	57,17	74,47	1,81,64	41.2
Bombay	46,10	49,12	95,22	29.8
Sind	11,59	20,08	31,67	9.9
Madrass	12,52	21,01	34.13	10.7
Burma	10,55	16,26	26,81	8.4
Total	1,37,93	1,81,69	3,19,52	100

Trade by Ports—The trade of the chief ports and important subordinate ports given India possesses a very long sea board, but very few harbours, and hence about 92 per cent of the foreign trade passes through the five chief ports, two of which are situated at a considerable dis-

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INDIAN COTTON DUTIES ACT.

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Industrial Expansion needed

These considerations bring us to the conclusion that India has much to gain economically from the free trade in cotton. It is not only a question of cotton, but of the whole of the Indian Empire. The fact that India produces more wheat than any other part of the Empire, and more cotton, sugar, jute, indigo and other agricultural products, is a fact of great importance. It is a fact which should be taken into account by the British Government in its policy towards India. The fact that India produces more wheat than any other part of the Empire, and more cotton, sugar, jute, indigo and other agricultural products, is a fact of great importance. It is a fact which should be taken into account by the British Government in its policy towards India.

Protection must come

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[illegible]

part by Branches outside of India, the Indian Branches share in the business consisting principally in collecting the amount of the bills at maturity and in furnishing their other branches with information as to the means and standard of the drawees of the bills, and it is as regards the export business that the Indian Branches are more immediately concerned. The Exchange Banks have practically a monopoly of the export finance in India and in view of the dimensions of the trade which has to be dealt with the Banks would under ordinary circumstances require to utilise a very large proportion of their resources in carrying through the business. They are able however by a system of rediscounting in London to limit the employment of their own resources to a comparatively small figure in relation to the business they actually put through. No definite information can be secured as to the extent to which rediscounting in London is carried on but the following figures appearing in the balance sheets dated 31st December 1914 of the undenoted Banks will give some idea of this

COUNTED AND STILL CURRENT LIABILITY ON BILLS OF EXCHANGE RECEIVED

Chartered Bank of India	3,871,000
Eastern Bank, Ltd	1,074,000
Hongkong and Shanghai Banking Corporation	11,584,000
Mercantile Bank of India, Ltd	1,788,000
National Bank of India, Ltd	4,037,000
	<u>21,854,000</u>

The above figures do not of course relate to re-discounts of Indian bills alone, as the Banks operate in other parts of the world also, but it may safely be inferred that bills drawn in India form a very large proportion of the whole. The bills against exports are largely drawn at three months' sight and may either be "clean"

or be accompanied by the documents relating to the goods in respect of which they are drawn. Most of them are drawn on well known firms at home or against credits opened by Banks or financial houses in England and bearing as they do an Exchange Bank endorsement they are readily taken up by the discount houses in India are sent home by the first possible mail so that presumably they are rediscounted as soon as they reach London the Exchange Banks are able to secure the return of their money in about 16 or 17 days instead of having to wait for three months, which would be the case if they were unable to rediscount. It must not be assumed however that all bills are rediscounted as soon as they reach London as at times it suits the Banks to hold up the bills in anticipation of a fall in the London discount rate while on occasions also the Banks prefer to hold the bills on their own account as an investment until maturity. The Banks place themselves in funds in India for the purpose of purchasing export bills in a variety of ways of which the following are the principal—

- (1) Proceeds of import bills as they mature
- (2) Sale of drafts and telegraphic transfers payable in London and elsewhere
- (3) Purchase of Council Bills and Telegraphic Transfers payable in India from the Secretary of State
- (4) Imports of bar gold and silver bullion
- (5) Imports of sovereigns from London, Egypt or Australia

The remaining business transacted by the Banks in India is of the usual nature and need not be given in detail.

The following is a statement of the position of the various Exchange Banks carrying on business in India as at 31st December 1914

In Thousands of £

Cash and Investment	Deposits	Reserve	Capital	
9281	18816	1800	1200	Chartered Bank of India
9318	63097	1636	8000	Comptoir National D'Escompte de Paris
338	1447	22	337	Delhi and London Bank, Ltd
1108	1395	55	398	Eastern Bank, Ltd
790	32931	3825	1300	Hongkong & Shanghai Bank
2689	4380	650	650	International Banking Corpn
1947	5132	500	562	Mercantile Bank of India
5283	14832	1100	1000	National Bank of India
7884	35847	2300	4743	Russo Asiatic Bank (1912)
6702	18602	2008	3000	Yokohama Specie Bank

JOINT STOCK BANKS.

Previous to 1906 there were few Banks of this description operating in India, and such as were then in existence were of comparatively small importance and had their business confined to a very restricted area. The rapid development of this class of Bank, which has been so marked a feature in Banking within recent years, really had its origin in Bombay and set in with the establishment of the Bank of India and the Indian Specie Bank in 1806. After that time there was a perfect stream of new notions, and although many of the new Companies confined themselves to legitimate banking business, on the other hand a very large number engaged in other businesses in addition, and can hardly be properly classed as Banks. These Banks made very great strides during the first few years of their existence, but it was generally suspected in well informed circles that the business of many of the Banks was

Growth of Joint Stock Banks

The following figures appearing in the Report of the Director General of Statistics shows the growth of the Capital, Reserve and Deposits of the principal Joint Stock Banks registered in India:—

In Lakhs of rupees	
Capital	Reserve Deposits
1870	9
1875	14
1880	18
1885	18
1890	5
1895	17

NATIVE PRIVATE BANKERS AND SHROFFS.

Capital & Reserve		Deposits	
Capital	Reserve	Deposits	
1895	64	2529	1913
1900	82	2665	270
1905	84	2665	94
1906	135	2665	63
1907	220	2665	3
1908	239	2665	2
1909	266	2665	13
1910	276	2665	1
1911	285	2665	27
1912	285	2665	27
1913	285	2665	27
1914	285	2665	27
1915	285	2665	27
1916	285	2665	27
1917	285	2665	27
1918	285	2665	27
1919	285	2665	27
1920	285	2665	27
1921	285	2665	27
1922	285	2665	27
1923	285	2665	27
1924	285	2665	27
1925	285	2665	27
1926	285	2665	27
1927	285	2665	27
1928	285	2665	27
1929	285	2665	27
1930	285	2665	27
1931	285	2665	27
1932	285	2665	27
1933	285	2665	27
1934	285	2665	27
1935	285	2665	27
1936	285	2665	27
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1963	285	2665	27
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1965	285	2665	27
1966	285	2665	27
1967	285	2665	27
1968	285	2665	27
1969	285	2665	27
1970	285	2665	27
1971	285	2665	27
1972	285	2665	27
1973	285	2665	27
1974	285	2665	27
1975	285	2665	27
1976	285	2665	27
1977	285	2665	27
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1982	285	2665	27
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1990	285	2665	27
1991	285	2665	27
1992	285	2665	27
1993	285	2665	27
1994	285	2665	27
1995	285	2665	27
1996	285	2665	27
1997	285	2665	27
1998	285	2665	27
1999	285	2665	27
2000	285	2665	27

Native private Bankers and Shroffs flourished in India long before Joint Stock Banks were over thought of, and it seems likely that they will continue to thrive for some very considerable time to come. The use of the word "Shroff" is usually associated with a person who charges usurious rates of interest to the people known as "Shroffs" in banking circles, as there is no doubt that the latter are of very real service to the business community and of very great assistance to Banks in India. Under present conditions the Banks in India can never hope to be able to get into sufficiently close touch with the affairs of the vast trading community in India to enable them to grant accommodation to more than a few of these traders direct, and it is in his capacity as middleman that the Shroff proves of such great service. In this capacity also he brings a very considerable volume of business within the scope of the Presidency Banks Act, and enables the Presidency Banks to give accommodation which, without his assistance, the Banks would not be permitted to give. The Shroff's position as an intermediary between the trading community and the Banks usually arises in something after the following manner. A Shopkeeper in the bazaar, with limited means of his own, and that, after using all his own money, he still requires say Rs. 25,000 to stock his shop suitably. He thereupon approaches the Shroff, and the latter after very careful inquiries as to the shopkeeper's position grants the accommodation, if he is satisfied that the business is safe. The business, as a rule, is arranged through a brood-dee broker, and in the case referred to the latter may probably approach about ten shroffs and secure accommodation from them to the extent of Rs. 2,500 each. A brood-dee is almost invariably taken by the Shroffs in respect of such advances.

A stage is reached however when the demands on the Shroffs are greater than they are able to meet out of their own money, and it is at this point that the assistance of the Banks is called into requisition. The Shroffs do this by taking a number of the bills they already hold to the Banks for discount under their endorsement and the Banks accept such bills freely to an extent determined in each case by the standing of the Shroff and the strength of the drawers. The extent to which any one Shroff may grant accommodation in the bazaar is therefore

dependent on two factors, viz, (1) the limit which he himself may think it advisable to place on his transactions, and (2) the extent to which the Banks are prepared to discount bills bearing his endorsement. The Shroffs keep in very close touch with all the traders to whom they grant accommodation and pass experience has shown that the class of business above referred to is one of the safest the Banks can engage in.

The rates charged by the Shroffs are usually based on the rates at which they in turn can discount the bills with the Banks and necessarily vary according to the standing of the borrower and with the season of the year. Generally speaking, however, a charge of two annas per cent per mensem above the Bank's rate of discount, or 1½% is a fair average rate charged in Bombay to a first class borrower. Rates in Calcutta and Madras are on a slightly higher scale due in a great measure to the fact that the competition among the Shroffs for business is not so keen in these places as it is in Bombay.

The Shroffs who engage in the class of business above described are principally Marwaries and Muslims having their Head Offices for the most part in Bikanir and Shikarpur, respectively, the business elsewhere than at the Head Offices being carried on by "Moonams" who have very wide powers.

It is not known to what extent native bankers and Shroffs receive deposits and engage in exchange business throughout India, but there is no doubt that this is done to a very considerable extent.

Since the outbreak of war many of the Shroffs, particularly those of the Marwar community, have discontinued their "brood-dee" business to a large extent and in some cases they have actually closed their places of business and resorted to their native places. The small traders who formerly relied on the Shroffs to provide them with funds have been greatly hampered in business in consequence and some indication of the restriction of credit arising from this cause may be gathered from the following figures relating to the discount of the Presidency Banks in discount current on 30th June 1913 on 30th June 1915

200 lacs	384 lacs
Bank of Bengal	204 lacs
Bank of Bombay	98
Bank of Madras	82
	Rs

30th June 1913 on 30th June 1915
Discount current on Presidency Banks

Bank of Bombay			Bank of Bengal			Bank of Madras		
Date	Rate		Date	Rate		Date	Rate	
January 1914	15	6	March 1914	19	6	October 1914	1	6
May	21	5	May	4	5	January 1914	2	7
June	4	4	June	4	4	May	25	6
"	25	3	July	9	3	June	8	5
August	6	4	August	6	5	"	23	4
"	13	5	November	5	6	August 1915	21	5
"	20	6	1915	2	5	October 1915	12	6
June 1915	2	5	June 1915	5	5	June 1915	7	5
December			December			December		

BANKERS' CLEARING HOUSES.

The principal Clearing Houses in India are those of Calcutta, Bombay, Madras, and Ranchi, and of these the first two are by far the most important. The members at these places consist of the Presidency Banks, most of the Exchange Banks and English Banking Agency firms, and a few of the better known of the local Joint Stock Banks. No Bank is entitled to claim to be a member as of right and any application for admission to a Clearing must be proposed and seconded by two members and be subject thereafter to ballot by the existing members.

The duties of settling Bank are undertaken by the Presidency Bank at each of the places mentioned and a representative of each member attends at the office of that Bank on each business day at the time fixed to deliver all cheques he may have negotiated on other members and to receive in exchange all cheques drawn on him negotiated by the latter. After all the cheques have been received and delivered the representative of each Bank advises the settling Bank of the difference between his total receipts and deliveries and the settling Bank thereafter strikes a final balance to satisfy itself that the totals of the debtor balances agrees with the total of the creditor balances. The debtor Banks thereafter arrange to pay the amounts due by them to the settling Bank.

The figures for the Clearing Houses in India above referred to are given below —

The figures for the Clearing Houses and as far as the transactions of the members and do not include in any way the totals of the cheques drawn on or negotiated by Banks not represented on the Clearing.

The Clearing House figures can usually be taken as giving some indication as to the condition of trade and to some extent also as to how far the banking facilities available are being taken advantage of but in the latter respect at all events the statistics for India do not form as useful a guide as those in most other countries. This is due to the fact that hardly any of the numerous Joint Stock Banks which have been formed within recent years have so far been admitted as members of the various Clearing Houses and as few if any of these Banks have obtained the assistance of the Clearing House returns merely represent the members in having their cheques cleared, the Clearing House returns merely represent the transactions of the members and do not include in any way the totals of the cheques drawn on or negotiated by Banks not represented on the Clearing.

Total amount of Cheques Cleared Annually

In lakhs of Rupees

	Calcutta	Bombay	Madras	Kanachi.	Total
1901	Not available	6,511	1,338	178	8,027
1902		7,013	1,295	268	8,576
1903		8,762	1,464	340	10,566
1904		9,492	1,536	365	11,393
1905		10,927	1,560	324	12,811
1906		12,012	1,583	400	12,895
1907	22,444	12,646	1,648	630	37,167
1908	21,281	12,586	1,754	643	36,268
1909	19,776	14,375	1,948	702	36,801
1910	22,238	16,062	2,117	755	41,762
1911	25,763	17,605	2,083	762	46,213
1912	28,831	20,831	1,162	1,159	52,835
1913	33,133	21,897	2,340	1,219	58,582
1914	28,031	17,696	2,127	1,315	49,169

The following are the Loans in the hands of the public still existing, (1) the others having been cancelled either by conversion or by discharge —

- (1) Three and a half per cent loan of 1812-13
- (2) Ditto
- (3) Ditto
- (4) Ditto
- (5) Three per cent loan of 1890-97
- (6) Three and a half per cent loan of 1900-01
- (7) Four per cent Terminal loan of 1913-19

The first four of these loans were made repayable at the option of Government on or after 31st July 1901 on three months' notice being given so that the position now as regards these loans is that Government are at liberty to discharge them at any time on giving three months' notice. In view however of the necessity of such borrowings by Government this power is not likely to be exercised for some considerable time to come.

The 3 per cent Loan of 1900-01 is repayable, also, at the option of Government, on or after 31st December 1920 on three months' notice being given and all loans issued since the year 1900 have been included in and form part of the 1900-01 loan.

In 1900 Government resolved in view of the emergency of the money market to try the experiment of borrowing at 3 per cent and the loan of Rs. 4 crores raised in that year was accordingly issued bearing that rate of interest. The opportunity was also taken to advance for the 3 per cent loans of 1893-94 but proprietors of these loans were given the option of transferring their holdings to the new 3 per cent loan. The Rs. 4 crores loan was successfully floated and appears to be a great success but it was soon seen that the public had no use for a 3 per cent security and Government have never repeated the attempt to borrow at 3 per cent. The successful lenders for the loan of 1898-97 experienced great difficulty in disposing of any part of their holdings and as through course of time the notes became practically unmarketable it was generally felt that Government must do something to improve the market for the notes. Various proposals were submitted to Government with this end in view but the latter delayed taking any action in the matter until the year 1908. Such action took the form of giving holders the option of converting their 3 per cent notes into 3 per cent notes on the following terms —

- (1) If the face value of the 3 per cent notes tendered for conversion is an exact multiple of Rs 700 the tenderer will receive in exchange 3 per cent notes for 0.75 of such face value
- (2) If the face value of the 3 per cent notes tendered for conversion does not form an exact multiple of Rs 700 the tenderer has the option of receiving —
 - (a) 3 per cent notes equivalent to the nearest lower multiple of Rs 700 calculated as in Clause 1 together with the difference in 3 per cent notes, or
 - (b) 3 per cent notes of the nearest higher multiple of Rs 700 calculated as in Clause 1 on payment in cash of the difference between the face value of the face value of the 3 per cent notes tendered and (1) the face value of the 3 per cent notes received in exchange.

Government of India Public Loans

(b) 3 per cent notes of the nearest higher equivalent face value in hundreds calculated as in Clause 1 on payment in cash of the difference between (1) 0.75 of the face value of the 3 per cent notes tendered and (1) the face value of the 3 per cent notes received in exchange.

The above offer is still in force but Government have reserved the right to withdraw it at any time on giving 6 months' notice. The balance of the 3 per cent loan stood at Rs. 10,95 lakhs on 31st March 1897, at Rs. 11,07 lakhs on 30th September 1908 and at Rs. 5,42 lakhs on 31st March 1913. The work connected with the payment of interest, &c, on Government loans is entrusted to the Presidency Banks in the 3 Presidency towns, to the District Treasuries elsewhere in India, and to the Bank of England in London.

The 4 per cent Terminal Loan of 1913-1916 was issued at par in August 1913 and the loan is not previously redeemed will be repaid at par on 31st November 1923, Government however reserves the right to redeem the loan or any part of it at any time on or after the 30th November 1920 on giving three months' notice. A new departure was made when issuing this loan — the public were permitted to make applications through the Post Office for sums not exceeding Rs. 5,000. Such applications received allotment in full. The offer remained open until 30th Oct, and resulted in a further subscription of forty-four lakhs.

Government debt may be held in the form of promissory notes or Stock Certificates but Notes or Certificates can only be issued in even hundreds of rupees. Promissory notes are transferable by endorsement and as such loans that Government do not keep any record of the holders of such notes from time to time. A holder of a Stock Certificate is a registered holder however and transfers can only be made by transfer deed which must be submitted to and approved of by the authorities conducting the loan business on behalf of Government. The question of issuing Bearer Bonds with or without coupons attached, is presently being considered by Government and it seems likely that this form of security will be issued in the near future.

Interest is payable half-yearly on each loan on the dates noted below

Loan of 1812-43	1st Feb'y & 1st August
Loan of 1854-55	30th June & 31st Decr
Loan of 1865	1st May & 1st Novr
Loan of 1879	16th Jan'y & 16th July
Loan of 1896-97	30th June & 31st Decr
Loan of 1900-01	30th June & 31st Decr

Interest may be made payable at the option of the holder at the Public Debt Office Banks of Bengal, Bombay or Madras, at any Government Treasury, or at the Bank of England, London. In the case of Promissory Notes, presentation of the notes at the office where interest is payable is necessary before interest can be

drawn but this does not apply as regards Stock Certificates and interest warrants in respect of these are sent out to the registered holder as soon as interest falls due. The interest on notes enclosed to London is paid by rupee drafts on India.

Renewal, Conversion, Consolidation and Sub-Division of Promissory Notes

When all the spaces reserved for endorsements on the reverse of a note have been filled up or when the spaces utilised for recording payments of interest have been exhausted the note requires to be renewed before any further transfers can be allowed or interest drawn. The fee for such renewal is at the rate of 1 per cent on the face value of the note subject to a maximum of Re 1 for each note but no renewal fee is charged in the case of a note on which no endorsements appear when the interest charges are expended.

CONVERSION

Promissory Notes of the 3 per cent loans of 1842-43, 1854-55, 1865, 1870 and 1890-01 may be transferred to any other of those loans except that no transfer to the loan of 1890-01 from any of the other loans is admissible. It is made a condition however before any such transfer is permitted that a full half-year's interest is due on the Promissory Note at the time it is presented for transfer. The fees charged are the same as those applicable to renewals.

CONSOLIDATION AND SUB-DIVISION

Notes of the same loan, on which interest has been paid up to the same date, may be consolidated or notes may be sub-divided into others of smaller denominations, but of the same loan, at the option of the promoters, notes only being issued for Rs 100 or multiples of Rs 100.

In the Indian Year Book for 1915 a full account was given of the disastrous failures of Indian banks, which commenced in 1913 and were continued throughout the greater part of the following year. Further, the statistics for complete details of this painful episode in the financial history of the country, reference must be made to that volume. The results of this acute commercial crisis are summarised below, and the liquidators' reports of the principal bank that failed, the Indian Specie Bank of Bombay, are appended.

FAILURES OF INDIAN BANKS.

In the Punjab—The People's Bank of India, Lahore, the Popular Bank, Rawalpindi, the Orient Bank of India, Lahore, and the Punjab Co-operative Bank, Amritsar.

(2) In Bombay—The Indian Specie Bank, and the Credit Bank of India, and the Kathiawar and Ahmedabad Banking Corporation.

(3) In the United Provinces—The Bank of Upper India, Meerut, the failure of which took place recently. It was reconstructed.

The most important failures in each province were—

11 in Bombay, 2 in the North-West Frontier Province, 2 in Delhi, and 1 each in Bangalore and Bala-chistan.

Since then 56 banks have failed, 28 in the Punjab, 11 in Bombay, 9 in the United Provinces, 2 in Madras, 2 in the North-West Frontier Province, 2 in Delhi, and 1 each in Bangalore and Bala-chistan.

The most important failures in each province were—

(1) In the Punjab—The People's Bank of India, Lahore, the Popular Bank, Rawalpindi, the Orient Bank of India, Lahore, and the Punjab Co-operative Bank, Amritsar.

Year	Rs	100 6 per cent	112 1/2 per cent	£	Sliding Loan.
1895	105 7	"	117	"	"
1896	105 7	"	117	"	"
1897	98	"	118 1/2	"	"
1898	95 1 1/2	"	117	"	"
1899	94	"	116 1/2	"	"
1900	95 10	"	110	"	"
1901	96	"	108	"	"
1902	95 14	"	108	"	"
1903	97 9	"	107	"	"
1904	95 2	"	103	"	"
1905	98 1	"	106 1/2	"	"
1906	97 1 1/2	"	105 1/2	"	"
1907	95 7	"	104	"	"
1908	96 8	"	102 1/2	"	"
1909	94 11	"	99	"	"
1910	93 7	"	98 1/2	"	"
1911	95 1	"	93 1/2	"	"
1912	96 2	"	94	"	"
1913	94 9	"	91 7-16	"	"
1914	95 10	"	85 1/2	"	"
1915	81 (Dec)	"	Nominal	"	"

The fee charged is at the rate of 1 per cent on the face value of the new notes received, subject to a maximum of Re 1 for each note.

The management of the debt in England is entrusted to the Bank of England who are paid commission at the rate of £300 per million pounds in respect of the sterling debt and £400 per crore of rupees in respect of the rupee debt. The charge for the latter is however subject to a minimum of £8,000.

Quotations for 3 per cent Government of India Loans

The total number of creditors whose claims have been admitted in whole or in part is 16,442, and the total amount of claims admitted is Rs 1,55,20,410-14-3. Of the total number of creditors, the claims of 8,121 did not in any case exceed Rs 10, and the aggregate amount of their admitted claims was only Rs 26,119-12-3. In these circumstances the Hon Mr Justice Macleod, by his order dated 16th July 1915, made after due notice had been given directed that all creditors whose admitted claims do not exceed Rs 10 be paid in full. This will considerably lighten the burden and expense of the liquidation. In pursuance of that order Rs 3,657-13-1 have been paid to such creditors. In the cases of creditors, their admitted claims, amounting to Rs 8,588-5-3 have been held to be preferential and of these Rs 13 have been paid in full, the amount so paid amounting to Rs 4,369 11 8.

On the 10th September 1914, suit No 966 of 1913 was filed in the High Court against the directors of the bank to recover the sum of Rs 1,66,44,494-0-6 being the aggregate of the losses sustained by the Company by reason of the misfeasance, neglect of duty, and breach of trust of defendants 1 to 7 and the late Choon-lal Dharandas Saraya and Lakhmasee Xapoo respectively as per particulars given and also in the alternative to recover the sum of Rs 23,33,307 being the aggregate amount of the dividends and bonus for the years 1909, 1910, 1911, 1912, and 1913 wrongfully paid out of capital as per particulars given. The issues in this suit were settled in July last and the cases to come on for hearing after the October vacation.

On the 23rd October 1914, suit No 1217 of 1914 was filed against the auditors of the bank to recover the sum of Rs 23,33,077 with interest being the aggregate amount of the dividends and bonus wrongfully paid out of capital through neglect of duty by the defendants in not examining the accounts and reporting and correctly certifying the result of such examination. This suit is now on the daily board.

The position of the liquidation independently of anything which may be recovered in the suits against the directors and auditors is at present

Rs		Rs	
Balance in Bank of Bombay on 7-9-15	43,18,950 12 0	Balance in hand	17,458 4 1
Estimated value of shares	13,00,000 0 0	Shivali Vittalal	2,54,000 0 0
Estimated value of calls	14,97,930 0 0	Estimated value of pearls	15,00,000 0 0
Estimated further recovery of calls	20,00,000 0 0	Estimated value of shares	14,97,930 0 0
Very of outstandings	8,72,000 0 0	Estimated further recovery of calls	20,00,000 0 0
		Rs	1,04,00,339 1 0
A dividend at the rate of four annas in the rupee has been declared. This will absorb about Rs 38,71,425, leaving a further estimated balance of about Rs 63,12,000, independently of any amount that may be recovered from the			
Others		Sugar factories	
11	40	1	10
18	70	2	2
28	1,10	3	3
47	1,10	4	4
12	47	5	5
14	14	6	6
18	18	7	7
4	4	8	8
4	4	9	9
7	27	10	10
5	27	11	11
4	18	12	12
2	8	13	13
3	27	14	14
1	18	15	15
0	11	16	16
0	11	17	17
0	11	18	18
0	11	19	19
0	11	20	20
0	11	21	21
0	11	22	22
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0	11	92	92
0	11	93	93
0	11	94	94
0	11	95	95
0	11	96	96
0	11	97	97
0	11	98	98
0	11	99	99
0	11	100	100

Joint-stock Companies registered in 1914-15

Joint-stock enterprise in India in the last official year received a serious setback, owing partly to war conditions and partly to the stringent measures of the new Indian Companies Act which came into force in April 1914. Returns compiled in the DEPARTMENT OF STATISTICS show that only 107 Companies were registered with an authorised capital of Rs 3,94 lakhs against 340 Companies and Rs 60,64 lakhs in 1913-14, and 284 Companies and Rs 12,19 lakhs in 1912-13. Five Companies were registered with an authorised capital of Rs 20 lakhs and above, seven with 10 lakhs and under Rs 20 lakhs, and eighteen Companies from Rs 4 lakhs to 8 lakhs. The capital invested was distributed amongst the different industries as shown below —

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generally applied to *Kharif* crops. Seeding is either done broadcast or by drilling behind a wooden plough or drill. Thinning and spacing is not nearly so well done as it might be, and intercultural work is generally too superficial. Harvesting is done by sickle where the crops are cut whole, and there is little waste involved. On the whole the methods of the ryots if carried out thoroughly would be quite satisfactory, but it is doubtful if this could be done with the number of cattle at his disposal.

Irrigation is necessary over the greater part of the country owing to insufficient rainfall and the varieties of the monsoon. Canal irrigation has been greatly extended over the Punjab, Sind, United Provinces and Madras through Government canals which, in addition to securing the crops over existing cultivated land have converted large desert tracts into fertile areas. The Punjab and parts of the United Provinces are naturally well suited to canal irrigation owing to the frequency of their rivers. The water is generally taken off at a point a little distance from where the rivers leave the hills and is conducted to the arid plains below. The main canal splits up into diverging branches, which again subdivide up into distributaries from which the village channels receive their supplies. Water rates are levied on the wheat and other crops. Government thus bearing a part of the loss in case of failure. Much of the land is supplied by what is termed "flow irrigation," i.e., the land is directly commanded by the canal water, but a great deal has to be lifted from one to three feet the canal running in such cases below the level of the land. Rates for lift irrigation are, of course, lower than those for flow.

Irrigation canals are generally classed into (1) perennial and (2) inundation canals. Perennial canals, which give supplies in all seasons generally have their headworks near the hills, thus commanding a great range of country. Earthen from the hills, owing to the very gradual slope of the land and the lowness of the rivers in the cold weather, perennial irrigation is without and inundation canals are resorted to. These canals only give irrigation when the rivers are high. As a rule, in Northern India they begin to flow when the rivers rise owing to the melting of the snow on the hills in May and dry up in September.

Irrigation from Wells—About one-quarter of the total irrigation of the country is got from lifting water from wells ranging in depth from a few feet to over fifty feet. The number of wells has greatly increased in recent years through Government advances for their construction. The receding cost of this form of irrigation has, however, greatly increased owing to the high price of draught cattle and the increasing cost of their maintenance.

Tank irrigation is common in Central and Southern India. Large quantities of rain water are stored in lakes (or tanks) and distributed during the drier seasons of the year by canal.

Manures—Feeding of animals for slaughter being practically unknown in India, the amount of farm yard manure generally available in other countries from this source is not nearly so well done as it might be, and intercultural work is generally too superficial. Harvesting is done by sickle where the crops are cut whole, and there is little waste involved. On the whole the methods of the ryots if carried out thoroughly would be quite satisfactory, but it is doubtful if this could be done with the number of cattle at his disposal.

Wheat—Wheat is grown widely throughout Northern India as a winter crop, the United Provinces and the Punjab supplying about two-thirds of the total output, and probably three-quarters of the total output in India. The majority of the varieties grown belong to the species *Triticum Vulgare*. Indian wheats are generally white, red and amber coloured and are mostly classed as soft from a commercial point of view. The grains are generally plump and well filled but the samples are spoiled through mixtures of various qualities. Wheat is generally adulterated to some extent with barley and largely with dirt from the threshing floor and although there is a good demand in England and the Continent for the surplus produce, prices compare unfavourably with those obtained for Canadian and Australian produce. The crop is generally grown after a summer fallow and, except in irrigated tracts, depends largely on the conservation of the soil moisture from the previous monsoon.

Rice—A reference to the crop statistics shows that rice is the most extensively grown crop in India, although it predominates in the wetter parts of the country, viz., in Bengal, Bihar and Burma and Madras. The crop requires for its proper maturing a moist climate with well assured rainfall. The cultivated varieties are numerous, differing greatly in quality and in suitability for various conditions of soil and climate, and the people possess an intimate acquaintance with those grown in their own localities. The better qualities are sown in seed beds and transplanted in the monsoon. Broadcast rice is grown generally in lowlying areas and is sown before the monsoon. Broadcast rice is grown generally in lowlying areas and is sown before the monsoon. Broadcast rice is grown generally in lowlying areas and is sown before the monsoon.

AGRICULTURAL PRODUCE.

The following table shows the area under the principal crops, in British India, and their territorial distribution for 1911. The cropped area is always greater than the area of cultivated land, owing to double cropping. The figures (which are preliminary) represent thousand acres.

Province	Rice	Wheat	Bark	Other food grains (Millet, Jowar, and Pulses)	Total food grains and Pulses	Oilseeds	Sugar Crops	Cotton	Indigo	Total cropped Area	Net cropped Area after deducting more than once
Bengal	10,735	144	91	1,602	21,573	1,803	277	26	2,716	29,690	21,209
Bihar and Orissa	4,755	6,377	4,377	15,004	4,880	391	3	3	101	6,110	5,407
Assam	6,140	8,473	970	9,438	32,658	784	1,180	1,748	18,769	27,000	15,000
United Provinces	800	1,031	291	1,040	2,406	1,179	111	1,828	27,128	26,044	20,044
Punjab	44	21	1,610	11,065	1,482	40	300	14,074	2,308	2,529	2,529
N W Frontier Province	10,331	25	10,373	17,892	2,348	20	4,802	2,3812	2,4470	34,181	34,181
Burma	4,086	25	18,735	20,440	3,177	162	4,231	20,130	543	20,132	20,132
Central Provinces and Berar	10,078	50	17,218	21,870	1,370	6	50	14,115	24,470	24,470	24,470
Madras	2,708	50	222	303	37	6	50	14,115	24,470	24,470	24,470
Bombay and Sind	83	20	50	303	37	6	50	14,115	24,470	24,470	24,470
Minor Areas	60,320	20,476	6,841	70,217	102,000	12,676	2,432	15,603	2,817	21,7556	107,065
Total											

* Figures for Minor Areas are for 1912-13

Agricultural Produce

[illegible][illegible][illegible]

Oilseeds—The crops classified under the heading are chiefly sesamum, linseed and the cruciferous oilseeds (rape, mustard, etc.) Although oilseeds are subject to great fluctuation in price and the crops themselves are more or less precarious by nature—they cover an immense area

Linseed requires a deep and moist soil and is thus grown chiefly in Bengal, Bihar and the United Provinces and the Central Provinces The crop is grown for seed and not for fibre and the common varieties are of much shorter habit of growth than those of Europe The yield varies greatly from practically nothing up to 500 or 600 lbs of seed per acre The seed is mainly exported whole but a certain amount of oil pressing is done in the country

Sesamum (Or Gingelly) is grown mostly in Peninsular India as an autumn or winter crop The seed is mostly exported.

The Cruciferous Oilseeds form an important group of crops in Northern India where they grow freely and attain a fair stature. They are one of the most useful crops in the rotation and for a few months only, and owing to their dense growth leave the soil clean and in good condition after their removal. A few varieties are grown differing from each other in habit of growth, time of ripening, and size and quality of seed. The best known are rape, toria, and sarson. The crop is generally sown in September or early October and harvested from December to February. The crop is subjected to the attack of aphids (green fly) at the time of flowering and sometimes suffers considerable damage from this pest. The seed

[illegible]

The Millets—These constitute one of the most important group of crops in the country, supplying food for the poorer classes and fodder for the cattle. The varieties vary greatly in quality, height and suitability for various climatic and soil conditions. Perhaps the two best known varieties are the Jowar (Sorghum vulgare) tall growing with a large open head, and Bajra with a close rat-tail head and thin stems. Generally speaking the Jowars are sown better land than the Bajras and the distinction of the two crops follows as the quality of the soil. Neither Jowar nor Bajra are so thoroughly appreciated and cultivated as for instance wheat, the main objective being to produce a crop as the Jowar is generally sown in the beginning of the monsoon and it is often grown to be thoroughly weeded. It is often grown mixed with the summer pulses and other crops in which cases the seedlings are reserved to be ripened either before the millet is harvested or afterwards. The produce is consumed in the country.

Pulses are commonly grown throughout India and the grain forms one of the chief foods of the people. Most kinds do well but are subject to injury from a shortening of day to a variety of insects and diseases which appear at the time of flowering. They are therefore one of the most important crops as well as being deep rooted and practically independent of a Nitrogen supply in the soil. They withstand drought and frost as well as a good temperature range. The chief crops raised are gram, mung, and moth, grain, the main winter crops. The pulses are raised throughout the year in the summer. They are good as food and as hay and seed and is not necessarily for grain especially the soil should be loose and well watered. Indian pulses are not largely exported although they are used to some extent in Europe as food for dairy cows.

Cotton is one of the chief exports from India and the crop is widely grown in the drier parts of the country. The lint from Indian cotton is generally speaking short and coarse in fibre and unsuited for English mills. The crop is grown during the summer months and requires a deep moist soil and light rainfall for its proper growth. Rain immediately after sowing or during the flowering period is injurious. In parts of Central and Southern India the seed is sown a few days and the crop receives careful attention but over

most common product but a certain amount of yellow leaf is grown for cigar making

LIVE-STOCK—Consists mainly of cattle, buffaloes and goats, horses not being used for agricultural purposes. Sheep are of secondary importance.

For draught purposes cattle are in more general use than buffaloes especially in the drier parts of the country, but buffaloes are very largely used in the low lying rice tracts. For dairying buffaloes are perhaps more profitable than cows as they give richer milk and more of it but they require more feeding. The poorer people depend largely on the milk of goats of which there are an enormous number throughout India. Cattle breeding is carried on mainly in the non-cultivated tracts in Central and Southern India, Southern Punjab and Rajasthan, where distinct breeds with definite characters have been preserved. The best known draught breeds are Bansi, Nellore, Amritmehal, Gujari, Malvi, and the finest milk cows are the Sahiwal (Punjab) Gir (Rajasthan) and Sind Oving however, to the areas well-bred cattle are becoming scarce, efforts to improve the quality of the cattle in the non-breeding districts by the use of selected bulls have hitherto been frustrated by the promiscuous breeding which goes on in the villages.

Dairying—Though little noticed, dairying forms a very large indigenous industry throughout India. The best known products are native butter (ghee) and cheese (dahi). During recent years a considerable trade in tinned butter has sprung up in Gujrat (Bombay Presidency). While pure ghee and milk can be produced in the villages, in the towns dairy products can scarcely be bought unadulterated.

AGRICULTURAL PROGRESS.

The Agricultural Departments in India as they now exist may be said to be a creation of the last ten years. There have for a good many years past been experimental farms, under official control, in various parts of India, but they were in the past to a large extent in the hands of amateurs, and the work of the Agricultural Departments, with all the major provisions were provided by about 1884, was in the main confined to the simplification of revenue settlement procedure and the improvement of the land records system. In 1901 the appointment of an Inspector-General of Agriculture gave the Imperial Agricultural Department for the first time an expert head, and placed the Government of India in a position to enlarge the scope of their own operations and to co-ordinate the work being done on independent lines in various provinces. At that time the staff attached to the Government of India consisted of an Agricultural Chemist and a Cryogenic Botanist, while trained Deputy Directors of Agriculture were employed only in Madras, Bombay and the United Provinces, and the Economic Botanist in Madras was the only provincial representative of the more specialised type of appointments. Within the next few years a number of new appointments were made, so that by March 1906 there were altogether 20 sanctioned agricultural posts, or these seven were Imperial, including a number of specialist appointments attracted to the Agricultural Research Institute and College, the establishment of which at Pusa in Bengal was sanctioned in 1903. A great impetus was given to the development of the Agricultural Department by the decision of the Government of India in 1905 to set apart a sum of 20 lakhs (£1,330,000) a year for the development of agricultural experiment, research, demonstration and instruction. Their ultimate aim, as then expressed, was the establishment of an expert Central farm in each large tract of country in which the agricultural conditions are appreciably homogeneous, to be supplemented by numerous small demonstration farms, the

is very subject to injury from rain and great care has to be taken in the drying. The produce is largely exported whole, but there is a considerable amount of local oil-pressing—the cake being in demand for feeding purposes. Two varieties of the plant are cultivated as a crop, Capsularis and Ollitorius. In the Ganges-Brahmaputra Delta the crop requires a rich moist soil. Owing to river inundation this part of India receives a considerable alluvial deposit every year and the land is thus able to sustain this exhausting crop without manure. The crop is rather delicate when young, but once established requires no attention, and grows to a great height (10 to 11 feet). Before ripening the crop is cut and retted in water. After about three weeks submersion the fibre is removed by washing and beating. At the present high range of prices jute may be considered to be the best paying crop in India.

Tobacco is grown here and there all over the country chiefly, however, in Bengal, Bihar, Bombay, Madras and Burma. Of two varieties cultivated Nicotiana Glabrum is by far the most common. Nicotiana Glabrum grows on deep and moist alluvium soils and a high standard of cultivation including liberal manuring is necessary. The crop is only suited to small holdings where labour is plentiful as the attention necessary for its proper cultivation is very great. The seed is germinated in seed beds and the young plants are transplanted when a few inches high, great care being taken to shield them from the sun. The crop is very carefully weeded and hoed. It is topped after attaining a height of, say, 2 ft., and all suckers are removed. The crop ripens from February onwards and is cut just before the leaves are become brittle. By varying the degree of fermentation of the leaves different qualities of tobacco are obtained. A black tobacco is required for Hookah smoking and this is the

	1900-7	1907-8	1908-9	1909-10	1910-11	1911-12	1912-13
Area	Area	Area	Area	Area	Area	Area	Area
Area under Oilseeds—							
Linseed	2,611,884	1,401,220	1,081,826	2,110,281	2,612,042	3,763,222	3,127,067
Sesamum (tili)	3,908,128	1,287,722	4,332,608	1,740,002	4,211,820	4,171,741	4,101,915
Rape and Mustard	4,211,651	3,597,155	3,887,122	4,093,630	3,805,746	1,224,746	3,655,300
Other Oilseeds	3,310,600	3,300,670	4,004,082	3,075,001	3,011,023	1,132,600	4,001,365
Total Oilseeds	13,906,305	12,435,071	14,105,698	14,025,067	14,631,230	16,101,805	14,035,780
Area under—							
Cotton	1,771,208	13,000,260	12,058,071	13,172,188	14,117,030	14,688,189	14,118,407
Jute	3,621,668	5,912,075	2,516,161	2,760,820	2,828,069	3,030,827	3,323,071
Other fibres	602,481	740,000	722,718	924,060	760,604	698,808	805,011
Indigo	448,601	405,905	280,651	295,706	282,767	274,926	227,016
Opium	611,879	638,012	116,318	171,208	181,637	220,104	107,714
Tobacco	1,000,210	974,468	951,712	1,013,472	1,067,082	908,911	901,720
Horticultural crops	4,647,723	1,008,324	4,627,878	4,718,809	1,881,742	4,077,024	5,770,406
Estimated yield* of—							
Rice (cleaned)	127,743,800	370,211,300	300,070,800	567,130,000	557,838,000	521,002,000	520,021,000
Wheat	8,401,700	6,325,100	7,610,000	9,613,000	10,040,600	9,811,500	9,500,700
Cotton†	17,777,032	31,042,127	27,618,157	34,083,609	†	4,811,500	†
Jute†	241,403,610	241,068,073	247,101,760	268,317,942	261,006,240	208,821,436	205,063,683
Cotton	4,034,000	3,782,401	4,200,150	1,028,000	4,103,000	3,925,000	1,326,000
Jute	0,200,400	0,817,800	0,310,800	7,200,000	7,032,000	8,214,700	0,521,800
Tansool	425,200	101,200	297,700	427,800	661,000	611,200	616,700
Rape and Mustard	1,063,100	688,000	987,500	1,218,100	1,213,200	1,271,000	1,271,700
Sesamum (tili)	561,000	285,700	164,300	260,800	511,800	371,400	431,400
Groundnut	271,700	352,600	405,700	150,900	503,200	612,200	37,000
Indigo	07,700	62,400	38,800	49,800	40,000	48,700	37,000
Cane-sugar	2,206,300	2,016,000	1,872,000	2,127,100	2,217,800	2,390,400	2,662,000

* The average of crops given in this table is for British India only, but the estimated yield includes the crops in certain of the Native States

† The statistics of the production of tea are for calendar years, those for coffee and opium for calendar years before 1908-9

‡ Return of production discontinued

creation of an agricultural college teaching up to a three years' course in each of the larger provinces and the provision of an expert staff in connection with these colleges for purposes of research as well as education. The eventual cost, it was recognised, would largely exceed 20 lakhs a year. The Pusa Research Institute and College alone has cost nearly £150,000 including equipment. A part of the cost was met from a sum of £30,000 placed at Lord Curzon's disposal by Sir Philipps, an American visitor to India. This example of munificence has recently been followed by Sir Sassoon J. David, who placed the sum of £53,800 at the disposal of the Government of Bombay for the establishment of vernacular agricultural schools and the improvement of agricultural methods, in commemoration of the visit of Their Imperial Highnesses to India.

Record of Progress

At the beginning of 1912 there were over 40 posts in the Indian Agricultural Service, besides that of Inspector-General, which was abolished at the end of the year 1911-12, the rapid advance of the provincial departments having rendered its continuance unnecessary. The officers serving directly under the Government of India included the Director of the Pusa Institute, who was also Principal of the Agricultural College, a cotton specialist, two mycologists, three entomologists, two agricultural chemists, and an economic botanist. Some of these were supernumerary officers undergoing training. The provincial agricultural departments vary in strength. Generally each of the larger provinces has at least a Deputy-Director of Agriculture (most provinces have two), an agricultural chemist, and an economic botanist. In several provinces the principalship of the agricultural colleges is a separate appointment and among the remaining officers are a fibre expert in East-Ceylon, Bengal and Assam, and a "scientific officer for planting industries in Southern India." The Government of Madras have also a mycologist and an entomologist of their own. The posts so far referred to have hitherto necessarily been filled almost exclusively by the appointment of trained specialists from the United Kingdom. There is also in the various provinces a considerable number of locally appointed Assistant Professors (in the Agricultural Colleges), Assistant Agriculturists and Entomologists, Agricultural Inspectors, Superintendent Officers of Farms, etc., and subordinate officers. It is an essential part of the scheme adopted that facilities for the best agricultural training shall be made available in India, in order that the country may become self-sufficient, so far as possible, in regard to the scientific development of agricultural methods on lines suited to local conditions. Provincial agricultural colleges, which are also research stations, have within the last few years been established in Madras, Bombay, Bengal, the United Provinces, the Punjab and the Central Provinces. The Central College at Pusa is intended to provide for more advanced training, and gives also short practical courses in subjects not at present taught in the provinces.

Work of the Departments

The work of the Agricultural Department has two main aspects. On the one hand by experiment and research, improved methods or crops are developed, or the means of combating a pest are worked out, on the other hand, ascertained improvements must be demonstrated and introduced as far as possible into the practice of the Indian cultivator. There is an essential difference between agricultural departments in the East and in the West in that, whereas the latter have arisen to meet the spontaneous demands of the cultivators of the soil, the former are entirely the creation of a government anxious to give all the assistance it can to its agricultural subjects. The demand for improved agriculture has not in India, except in special cases, come from the cultivators, and it is necessary for the Department to put forth every effort, first to ascertain the needs of the cultivators and then to demonstrate how they can most effectively be met. It is only a few years since work on modern lines was commenced by the reorganised agricultural departments, and, in the first place, a great deal of spadework had to be performed.

Machinery

The rapid extension in India in recent years of the use of machinery in connection with agriculture and irrigation has created a demand for expert assistance to meet which Agricultural Engineers have since the end of the period under review been appointed in Bombay and the United Provinces to advise cultivators as to engines, pumps, threshing machinery, etc., and to bring the provincial agricultural departments more closely in touch with one another.

made in 1905 by the creation of the Board of Agriculture. The Board, which includes the Imperial and provincial experts, meets annually to discuss the programme of agricultural work, and agricultural questions generally, and make recommendations which are submitted to the Government of India for consideration.

Cotton

Cotton from the first received much of the attention of the new departments. Very striking results have already been achieved, and more particularly with Cambrida and other exotic varieties. The second line of improvement is the separation and selection of indigenous varieties. In Madras the efforts of the Agricultural Department have resulted in the spread of the local improved variety called *Karungy* in the Tinnevely District and white seeded *Delipathi* cotton in Burmo.

AREA, CULTIVATED AND UNCULTIVATED, IN 1912-13, IN ACRES

ADMINISTRATIONS	Area according to Survey	Feudatory and Tributary States	Area for which no Returns exist	Total	According to Survey		NET AREA
					to Village	to Papars	

Bengal	53,931,504	3,451,520	3,451,520	50,479,984	50,479,984	50,479,984	
Bihar and Orissa	71,418,217	18,334,720	18,334,720	53,083,497	53,083,497	53,083,497	
Assam	39,272,494	7,069,820	7,069,820	32,202,674	32,202,674	32,202,674	
United Provinces	57,372,937	1,345,232	1,345,232	56,027,705	56,027,705	56,027,705	
United Provinces (Azamgarh)	15,000,720			15,000,720	15,000,720	15,000,720	
Punjab (United)	80,067,319	24,511,334	24,511,334	61,855,985	61,855,985	61,855,985	
North-West Frontier Province	8,578,499	140,800	140,800	8,437,699	8,437,699	8,437,699	
Upper Burma	57,802,617	3,997,722	3,997,722	53,804,895	53,804,895	53,804,895	
Lower Burma	54,909,711			54,909,711	54,909,711	54,909,711	
Central Provinces	72,532,916	19,980,443	19,980,443	52,552,473	52,552,473	52,552,473	
Bihar	11,328,700			11,328,700	11,328,700	11,328,700	
Almora-Merwara	1,770,721			1,770,721	1,770,721	1,770,721	
Coorg	1,012,260			1,012,260	1,012,260	1,012,260	
Madras	97,448,741	6,478,899	6,478,899	91,069,842	91,069,842	91,069,842	
Bombay	85,620,515	36,970,200	36,970,200	48,651,315	48,651,315	48,651,315	
Sind	34,143,132	3,872,000	3,872,000	30,271,132	30,271,132	30,271,132	
Pargana Manipur	31,382			31,382	31,382	31,382	
Total	748,868,885	129,041,740	129,041,740	618,927,145	618,927,145	618,927,145	748,868,885

ADMINISTRATIONS	Net Area actually Cropped	Current Fallows	Culturable Waste other than Fallow	Not available for Cultivation	UNCULTIVATED		Forests
					Not available for Cultivation	Forests	
Bengal	25,954,900	4,914,369	5,201,098	10,152,627	4,256,990	4,256,990	
Bihar and Orissa	27,122,100	3,388,166	7,868,360	9,933,802	4,741,040	4,741,040	
Assam	5,253,383	2,592,200	15,034,513	5,105,500	2,343,028	2,343,028	
United Provinces	26,784,225	2,172,519	7,484,283	7,645,164	8,717,421	8,717,421	
United Provinces (Azamgarh)	9,278,458	584,862	2,776,589	2,227,857	613,183	613,183	
Punjab (United)	34,139,016	3,527,685	17,416,085	12,986,292	3,348,481	3,348,481	
North-West Frontier Province	2,140,107	697,675	2,734,926	2,627,083	374,676	374,676	
Upper Burma	4,963,705	4,207,274	10,762,018	21,533,089	12,238,810	12,238,810	
Lower Burma	9,074,260	610,559	14,750,818	25,573,682	6,970,292	6,970,292	
Central Provinces	17,683,822	2,566,032	13,503,064	4,097,175	14,912,335	14,912,335	
Bihar	6,933,930	1,193,970	161,366	893,442	2,162,093	2,162,093	
Almora-Merwara	359,467	43,005	127,267	853,454	90,732	90,732	
Coorg	140,257	162,897	20,870	330,449	337,795	337,795	
Madras	34,605,907	8,210,373	9,963,993	23,047,490	12,814,759	12,814,759	
Bombay	25,180,263	8,338,918	1,523,233	6,021,149	7,573,752	7,573,752	
Sind	3,990,570	5,197,596	5,683,587	14,600,919	798,660	798,660	
Pargana Manipur	7,293	202	6,894	878	16,025	16,025	
Total	224,165,802	48,760,338	113,024,857	146,036,582	82,400,331	82,400,331	

* A British district in Central India

Another crop yield which considerable success has been attained is **Groundnut**, the cultivation of which had at the beginning of the decade fallen off, owing partly to the prevalence of a harmful disease and partly to defective methods of cultivation. In Bombay, and in Burma, cultivation has advanced with extraordinary rapidity.

Another success of marked importance achieved by the efforts of the provincial agricultural departments is the introduction of **agricultural implements** and machinery suited to the conditions of different provinces. Information and assistance in regard to the choice of implements suitable for various conditions has, under present circumstances, to be interpreted and brought home to Indian cultivators by a more direct agency than business firms, and the agricultural departments have therefore to do a good deal of this work. They have succeeded already in introducing various kinds of implements in different parts of the country. Every assistance is given in the use and repair of implements recommended up to the present, the departments perform to a certain extent the functions of dealers in implements, but it is becoming difficult to control the work as the area covered by the introductions is gradually becoming large, and a need for the development of co-operative societies is felt in Bombay, the Department has introduced ploughs of various patterns and is selling a larger number each year in some provinces. Iron ploughs are becoming very popular. The possibilities of improved harrows, cultivators, and clod-crushers are also receiving attention.

Money spent on agriculture is a good investment, but material results are difficult to gauge. Many factors have to be considered, & whole industry threatened by destruction may be saved by the discovery and application of preventive and protective methods. The treatment of the palm industry and acreage and industry of Madras and the protection of the potato crop of Patna are illustrations of this kind. Again, there are the direct gains following the introduction of new or improved crops, implements, well-boring and improved methods of cultivation. We may, at a conservative estimate, claim that the increase to the value of the agricultural products of India as a result of the labours of the Agricultural Departments is already about 2½ crores of rupees annually, or £2,300,000. This is the result of only ten years' work, and it must be remembered that every year will show a progressive increase. On the debit side we have an annual expenditure on agriculture which has risen from Rs. 8,81,124 or £58,742 in 1904-05 to Rs. 51,50,652 or £3,12,010 in 1913-14.

TEN YEARS' PROGRESS.

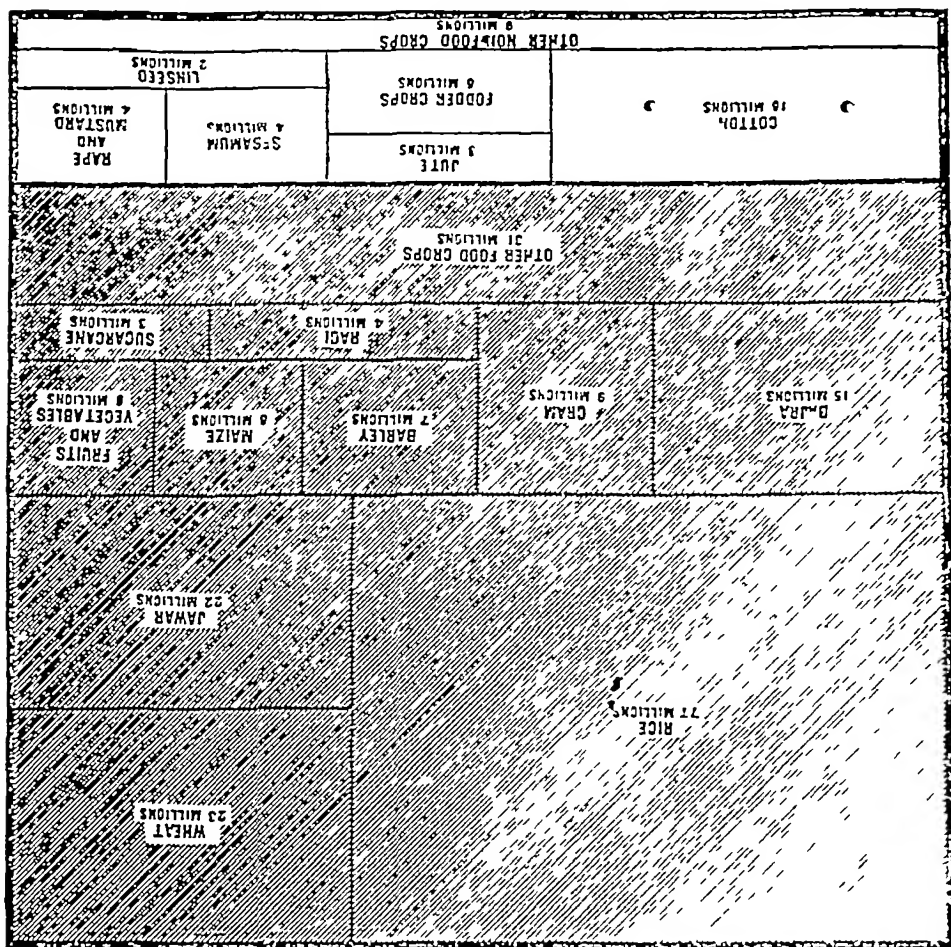
both of these varieties having been selected from among the mixtures ordinarily grown in the district. A system of seed distribution was gradually built up, and now, after five or six years' work, there is a vast area under the Department supplies pure seed to contract seed growers and buys the seed-cotton from these men, plants it, and arranges the distribution of seed through village depots. In Bombay, two have been selected as the best out of many hybrids and pure line cottons bred and tried for many years on the Surat farm. They give a distinct advantage both in quantity and quality over the ordinary local cotton, and promise to sell at rates 5 per cent higher. In another part of the province arrangements are being made to distribute on a large scale seed of another improved form, which can be grown, it is estimated, over 1,800,000 acres in the Southern Maratha Country. Broach gaining favour. There is said to be scope for 250,000 acres, and the increased profit to the cultivator is estimated at £1 or more per acre. In the Central Provinces also, two indigenous varieties have been selected in the United Provinces seed of a superior variety is being distributed. Wheat also has been the subject of prolonged experiments. One of the first results of the investigations carried out at Pusa, was the demonstration of the fact that varieties with milling and baking qualities similar to those of the best wheats, the English market could be grown to perfection in Bihar. By the application of modern methods of selection and hybridisation these high grain qualities were successfully combined with high yielding power, rust-resistance and strong straw.

In 1915, Mr. James MacKenzie, I.C.S., Director of Agriculture in Burma, published a brochure in which he reviewed the progress in Agriculture in India in the last ten years. In this, reviewing the effects of the work of the new Agricultural Departments, he said—
“The Agricultural Departments are now regarded as an integral and important part of the administration. The few European and Indian workers of 1905—158 in all—now number 866. Their labours are concentrated and coordinated. They now work on general schemes of development. Farms and demonstration plots, formerly scattered and disconnected, have increased from 55 to 374, and work on them is concentrated on the main problems, and not dissipated as used to be the case over a number of subsidiary and unimportant enquiries.”
“As a result the Department can claim credit for a great advance in general agricultural practice. Cultural and manual problems have in many cases been solved. Local machines have been improved and adapted, or better implements introduced. Real and substantial work has been done on the improvement of such important crops as wheat, cotton, rice, sugar-cane and tobacco. The general principles of

TOTAL AREA CROPPED IN 1912 14.

(BRITISH INDIA)

For 14 Area cropped 217 million acres
 Area under food crops (shaded) 203 million acres.
 Area under non food crops (unshaded) 14 million acres



NOTE.—"Other food crops" are minor food-grains, condiments and spices, and miscellaneous food crops
 "Other non food crops" are oilseeds other than sesamum, linseed, rape and mustard, fibres other than cotton and jute, dyes, drugs and narcotics, and miscellaneous non food crops

Administrations	Rice	Wheat	Barley	Jawar or (Great Columb) Millet)	Bajra or (Spilled Columb) Millet)	Ragi or (Millet) Marna)
Bengal	21,166,000	146,300	94,800	3,200	7,200	16,300
Bihar and Orissa	16,074,900	1,177,400	1,332,700	122,300	93,100	938,100
Assam	4,616,176	524	524		1,927	156,681
United Provinces (Agra)	1,387,169	5,435,482	8,480,581	1,850,029	2,183,831	156,681
United Provinces (Oudh)	2,474,835	2,007,004	1,162,753	318,441	484,608	66,771
Punjab	741,901	8,706,689	1,006,715	1,212,222	2,676,833	20,262
West Frontier Province	45,005	927,125	214,679	94,560	204,546	
Upper Burma	2,095,715	25,597		516,023	239,952	
Lower Burma	8,196,042			10	5	
Central Provinces	4,968,218	7,304,604	16,326	1,621,729	48,862	13,543
Berar	31,397	304,951	69	2,266,670	104,845	38
Ajmer-Merwara	409	27,137	23,380	61,346	31,340	26
Coorg	3,022					
Madrass	10,943,735	18,327	1,460	5,219,753	3,606,349	2,599,958
Bombay	1,860,110	1,201,941	28,976	7,074,559	5,496,435	636,237
Sind	1,087,525	456,882	20,169	603,404	1,140,856	613
Pargana Manipur	136	1,629	3	2,684	39	
Total	78,752,493	23,861,187	7,420,335	20,967,730	16,268,801	4,455,537

CROPS UNDER CULTIVATION IN 1912-13 IN ACRES

Administrations		Cotton	Jute	Other Fibres.	Total Fibres	Indigo	Other Dyes
Total		14,138,497	3,323,951	805,911	18,268,359	227,046	412,109
Bengal	26,200	2,927,100	35,900	2,989,200	1,000	90,400	9,800
Bihar and Orissa	87,200	298,500	20,000	406,300	22,930	24,805	1,186
Assam	36,052	98,851	311	134,714	4,591	38,089	2,027
United Provinces (Agra)	1,050,446		115,133	1,174,579	22,930	1,186	9,800
United Provinces (Oudh)	59,933		24,064	88,997	4,591	38,089	2,027
Punjab	1,442,929		54,787	1,497,716	4,591	38,089	2,027
N W Frontier Province	53,104		738	53,842	16	16	16
Upper Burma	208,787		366	209,153	128	128	128
Lower Burma	32,267		355	32,622	1	1	1
Central Provinces	1,355,205		35,691	1,440,896	18	18	18
Berar	3,138,394		54,378	3,192,772	3	3	3
Ajmer-Merwara	49,191		141	49,322	27	27	27
Coorg	2,388,998		114	2,400,112	66,552	66,552	2,078
Madras	3,910,845		121,720	4,032,565	25	25	395,521
Sind	287,375		121,720	4,032,565	25	25	395,521
Pargana Manipur	563		47	610	610	610	508

Administrations		Rape and Mustard.	Other Oil Seeds	Total Oil Seeds	Condiments and Spices	Sugar Cane	Sugar Other
Total		3,555,300	4,091,368	14,935,780	1,390,237	2,546,522	165,563
Bengal	1,325,400	45,800	2,173,900	1,822,200	143,300	221,800	49,300
Bihar and Orissa	724,600	543,700	2,173,900	321,416	92,700	270,700	300
Assam	298,416	136	321,416	2,880	35,928	35,928	
United Provinces (Agra)	75,144	58,120	770,630	98,256	1,174,657	1,174,657	
United Provinces (Oudh)	72,487	1,804	247,601	16,132	249,407	249,407	
Punjab	887,781	4,668	1,093,000	7,871	367,373	367,373	
N West Frontier Province	79,620	40	89,142	5,210	29,879	29,879	
Upper Burma	281	*192,976	1,330,335	64,041	3,046	3,046	
Lower Burma	3,351	*5,727	81,987	21,533	11,168	11,168	
Central Provinces	42,229	388,604	2,536,629	53,934	24,805	24,805	
Berar	441	59,392	241,032	22,936	1,003	1,003	
Ajmer-Merwara	18	1,231	35,728	2,043	210	210	
Coorg	4,295	531,409	982,484	183,246	53,728	53,728	
Madras	41,237	149,261	239,156	8,822	3,835	3,835	
Sind	381	381	831		5	5	
Pargana Manipur	381	381	831		5	5	

Adminis-trations	Opium	Coffee	Tea	Tobacco	Other Drugs and Narcotics	Fodder Crops
Bengal Bihar and Orissa Assam United Provinces (Agra) United Provinces (Oudh) Punjab N W Frontier Province Upper Burma Lower Burma Central Provinces Berar Ajmer-Merwara Coorg Madras Bombay Sind Pargana Manipur	115,600 22,100 4,41 970,095 143,836 3,650,287 92,588 3,642 3,612 2,500	150,500 2,200 361,671 7,998 13,554 47,451 29,670 11,450 58,458 18,216 11,450 40 23 40,643 24,046 97	337,836 964,726 119,087	357,836 964,726 119,087	357,836 964,726 119,087	3,770,466
Fruits and Vegetables including root crops	Food	Non-Food	Total Area Cropped	Deduct Area Cropped more than once	Net Area Cropped	Total
Bengal	828,300	450,500	350,700	30,498,300	4,543,400	25,954,900
Bihar and Orissa	766,300	490,300	262,800	33,178,400	6,056,800	27,122,100
Assam	400,448	42,638	72,876	6,273,825	430,402	5,843,383
United Provinces (Agra)	255,170	137,791	36,522	32,312,902	5,528,674	26,784,228
United Provinces (Oudh)	94,486	55,813	2,575	12,118,835	2,840,377	9,278,458
Punjab	257,431	82,755	16,666	27,510,227	3,951,006	24,159,016
N W Frontier Province	9,392	59,177	3,883	2,549,281	409,124	2,140,107
Upper Burma	519,638	16,566	3,525	5,397,014	438,311	4,963,703
Lower Burma	446,207	2,361	120,466	9,039,533	5,273	9,034,260
Central Provinces	87,358	2,330	631	19,434,788	1,750,961	17,683,822
Berar	11,413	2,330	248	6,952,079	18,143	6,938,980
Ajmer-Merwara	556	7,494	938	395,298	38,835	356,463
Coorg	4,628	1,494	141,343	4,513,874	1,000	34,605,903
Madras	1,164,356	143,528	39,119,874	4,287,061	296,491	3,990,570
Bombay	580,412	1,245	2,076	26,138,281	958,018	25,180,263
Sind	41,753	101	45,326	4,287,061	296,491	3,990,570
Pargana Manipur	3	1	13	7,650	357	7,293
Total	5,465,857	1,382,405	1,067,975	255,856,431	31,190,829	224,165,602

Crop Forecasts for 1915-16.—The following is a summary of the various crop forecasts relating to the season 1915-16 issued by the Department of Statistics, India, and published in the *Indian Trade Journal* on the dates mentioned in the last column.—

Crop	Tracts comprised in the figures and percentage of total Indian crop represented by them	Estimated Area	Per cent (100 = average of five years at corresponding date)
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Per cent	Area	Sugarcane	Cotton	Indigo	Rice	Groundnut
105	2,508,000	U P, Punjab, Bihar and Orissa, Bengal, Madras, Bombay and Sind, N-W F Pro- vince, and C P and Berar (99 per cent of total sugarcane area of British India)	U P, C P and Berar, Madras, Bombay and Sind, Bengal, Bihar and Orissa, Punjab and Ajmer-Merwara (78 per cent of total cotton-growing area of British India)	Practically all Indigo growing tracts	Bengal, Bihar and Orissa, Madras, Burma, U P, C P and Berar, Bombay and Sind* and Assam (99 per cent total rice area of British India)	Madras, Bombay* and Burma (99 per cent of total groundnut area of British India)
		104	16,253,000	258,100	74,431,000	149

including Native States

THE CIVIL VETERINARY DEPARTMENT.

To the Civil Veterinary Department, which originated in 1892 as an expansion of the military horse-breeding department, is entrusted the performance or supervision of all official veterinary work in India, other than that of the Army. Its duties fall under the main heads of cattle disease and cattle breeding, horse and mule breeding, and educational work in veterinary colleges. In 1905 and the following years both the superior and the subordinate establishments were considerably increased, but the strength of the subordinate staff in most provinces was still the same. Of late years small veterinary departments, modelled on the Civil Veterinary Department, were started in several native states.

The hot weather period, discussed above, the winds and weather are mainly determined by local conditions between the Equator and Lat 30° or 35° south the wind circulation is that of the south-east trades, that is to say about Lat 20° North there is a north-east wind which blows southward till it reaches the thermal equator where side by side with the south-east trades mentioned above, the air rises into the upper strata of the atmosphere. Still further to the northward and in the immediate neighbourhood of and there are the circulations due to the land and sea breezes which are attributable to the difference in the heating effect of the sun's rays over land and sea. It is now necessary to trace the changes which occur and lead up to the establishment of the south-west monsoon period. The sun at this time is progressing slowly northward towards the northern Tropic. Hence the thermal equator is also progressing northward and with it the area of ascent of the south-east trades circulation. Thus the south-east trade and further northward, as the thermal equator crosses the equator and advances further north, the sun in its northern progress. At the same time the temperature over India increases rapidly and barometric pressure diminishes, owing to the air rising and being transferred to neighbouring cooler regions—more especially the sea areas. Thus we have the southern Trades circulation extending northward and the local land and sea circulation extending southward until about the beginning of June the light unsteady interfering circulation over the Arabian Sea finally breaks up, the immense circulation of the south-east trades, with its cool, moisture laden winds rushing forward, becomes linked on to the local circulation proceeding between the Indian land area and the adjacent seas and India is invaded by oceanic conditions—the south-west monsoon proper. This is the most important season of the year as upon it depends the prosperity of at least five-sixths of the people of India.

When this current is fully established a continuous air movement extends over the Indian Ocean, the Indian seas and the Indian land area from Lat 30° S to Lat 30° N the southern half being the south-east trades and the northern half the south-west monsoon. The most important fact about it is that it is a continuous horizontal air movement passing over an extensive oceanic area where steady evaporation is constantly in progress so that wherever the current enters the Indian seas and flows over the Indian land it is highly charged with aqueous vapours.

The Current enters the Indian seas quite at the commencement of June and in the course of the succeeding two weeks spreads over the Arabian Sea and Bay of Bengal up to their

extreme northern limits India from these two seas. The Arabian sea current blows on to the west coast and sweeping over the Western Ghats prevails more or less exclusively over the Peninsula, Central India, Rajputana and north Bombay. The Bay of Bengal current blows directly up the Bay. One portion is directed towards Burma, East Bengal and Assam while another portion curves to south at the head of the Bay and over Bengal, and then meeting with the barrier of the Himalayas curves still further and flows as a south-easterly and easterly wind right up the Gangetic plain. The south-west monsoon continues for three and a half to four months, viz, from the beginning of June to the middle or end of September. During its prevalence more or less general though far from continuous rain prevails throughout India the principal features of the rainfall distribution being as follows. The greater portion of the Arabian Sea current, the total volume of which is probably three times as great as that of the Bengal current, blows directly on to the west coast districts. Here it meets an almost continuous hill range, is forced into, ascends and gives heavy rain alike to the coast districts and to the hill range, the total averaging about 100 inches most of which falls in four months. The current after parting with most of its moisture advances across the Peninsula giving occasional uncertain rain to the Deccan and passes out into the Bay where it coalesces with the local current. The northern portion of the current blowing across the Gujarat, Kathiawar and Sind coasts gives a certain amount of rain to the coast districts and frequent showers to the Aravalli Hill range but very little to Western Rajputana, and passing onward gives moderate to heavy rain in the Eastern Punjab, Eastern Rajputana and the north-west Himalayas. In this region the current meets and mixes with the monsoon current from the Bay.

The monsoon current over the southern half of the Bay of Bengal blows from south-west and is thus directed towards the Tenasserim hills and up the valley of the Irrawaddy to which it gives very heavy rain. That portion of this current which advances sufficiently far northward to blow over Bengal and Assam gives very heavy rain to the low-lying districts of East Bengal and immediately thereafter coming under the influence of the Assam Hills is forced upwards and gives excessive rain (perhaps the heaviest in the world) to the southern face of these hills. The remaining portion of the Bay current advances from the southward over Bengal, is then deflected westward by the barrier of the Himalayas and gives general rain over the Gangetic plain and almost daily rain over the lower ranges of the Himalayas from Sikkim to Kashmir.

On the south of this easterly wind of the Bay current and to the north of the westerly wind of the Arabian Sea current there exists a debatable area running roughly from Hissar in the Punjab through Agra, Allahabad and Calcutta of Chota Nagpur to Orissa, where neither the rainfall is uncertain and would probably

MONSOON OF 1915.

The Arabian Sea monsoon arrived on the west coast about the middle of June, a fortnight after the normal date, and although it gave abundant rain to the greater part of the Peninsula, it failed to penetrate properly into regions further north. The Bay current set in very gradually and at first provided less rain than usual with the result that over practically the whole tract, stretching from Bihar and Orissa to the valley of the Indus, the rainfall of June was more or less in defect of the normal. In the area comprising the Punjab, Sind and Rajasthan the month's fall was barely 50 per cent of the average. During July there was a marked break between the 2nd and the 12th, and although thereafter there was a gradual improvement in the general activity of the currents, the monsoon failed to extend satisfactorily into Rajasthan, Sind and the Punjab. But little change occurred in the general behaviour of the monsoon in August, the chief features of which were an almost complete break in the field of the Arabian Sea current between the 9th and the 20th and the accentuation of the drought in north-west India. A marked increase in the activity of the monsoon took place in September and with but slight variation lasted up to the 12th of October when winter actions set in over Northern India. The improvement was most noticeable in north-west India, in most parts of which favourable rain occurred and the drought which at one time threatened to prove as serious as in 1877 was mitigated considerably.

As usually happens during seasons of weak monsoon conditions, there were comparatively few cyclonic disturbances and of these the only noteworthy one was that which occurred towards the end of August and caused a deluge of rain in the region round Lucknow and Calcutta. The final retreat of the monsoon from north-west India occurred on October 12th, about three weeks after the average date. The aggregate rainfall of the whole season from June 1st to October 15th, in the plains of India did not depart to any great extent from the normal, being in defect by only 2" or 5 per cent. Its geographical distribution was, however, not quite satisfactory. Thus the total fall for the monsoon season in northern and central India exceeded the normal only in Assam, Bengal, Bihar, the United Provinces, East, Central India East and the Central Provinces, while the total fall in the Peninsula was greater than usual everywhere except in Madras South-east and Konkan.

In Burma the recorded quantity was very nearly normal. For meteorological purposes India is divided into 33 sub-divisions and taking the whole season from 1st June to 15th October, in three of those the rainfall was in excess of the normal by more than 20 per cent in excess of the normal and in eighteen within 20 per cent of the normal and in the twenty per cent. The most characteristic features of the monsoon of 1915 thus were—(a) Its late arrival in August, particularly in the usual field of the Arabian sea current, (c) Its failure to penetrate into north-west India before the middle of September, (d) Its continuance up to about the middle of October in north-west India where as a rule the rains come to an end in the third week of September, and (e) Its unusual concentration in the Peninsula to the detriment of northern India.

Rainfall, 1st June to 15th October 1915					Division	
Actual	Normal	Departure from normal	Percentage departure from normal			
75.1	81.0	-5.9	-7.3	7	Burma	
68.2	68.8	-0.6	-0.8	3	Assam	
60.3	65.2	-4.9	-7.5	8	Bengal	
41.8	47.5	-5.7	-12.0	12	Bihar and Orissa	
43.7	37.7	+6.0	+16.2	16	United Provinces	
8.6	15.8	-7.2	-45.6	46	Punjab	
2.1	5.1	-3.0	-59.8	59	Sind	
10.2	18.5	-8.3	-45.4	45	Rajputana	
36.1	39.8	-3.7	-9.3	9	Bombay	
32.7	35.1	-2.4	-6.8	9	Central India	
43.2	41.6	+1.6	+3.9	4	Central Provinces	
32.1	28.4	+3.7	+13.0	13	Hyderabad	
19.3	19.3	0	0	6	Mysore	
81.7	29.7	+52.0	+176.8	5	Madras	
					Mean of India	

The Textile Industry.

Central India 292,000 1,520,000

Madras 323,000 2,383,000

Rajputana 168,000 1,200,000

Mysore 12,000 107,000

Of an average outturn of four million bales it may be said that 1,733,000 bales are exported

450,000 consumed in India outside the mills, and 1,781,000 consumed by the Indian mills, and

The distribution of the export trade is indicated in the appended table

Exports of cotton—A portion of the Indian crop of the season 1913-14 and a portion of the crop of the season 1914-15 came into statistical consideration in the exports during the year 1914-15. The exports amounted to 103 million cwt valued at Rs 311 crores, against 103 million cwt, valued at Rs 311 crores in 1913-14. This represents 42 per cent of the total value of raw materials exported from India and 19 per cent of the total exports. The exports showed a decrease of nearly 3 per cent in quantity and 18 per cent in value. The average declared value per unit fell from Rs 38.10-1 to Rs 32.59 per cwt or by 16 per cent and the total loss due to reduced prices amounted to Rs 67 crores. The distribution of the trade is shown below. About 62 per cent of the trade was effected in the pre-war period. The United Kingdom, Italy and Japan had larger receipts during the war period, as compared with those in the earlier period. The principal purchasers of cotton other than Japan are in normal years Germany, Belgium, Italy, Austria-Hungary and France.

Exports of raw cotton 1913-14 1914-15 Tons 446,876 222,717 42,742 67,742 84,403 61,974 56,654 69,718 19,216 33,389 27,352 29,257 20,211 27,614 9,714 17,493 8,347 11,218 Bombay is the great centre of the cotton trade. The principal varieties are Dhollera, Broach, Comras (from the Berar), Dhawar and Comrat. Broach is the best cotton grown in Western India. Hingnagar cotton, from the central Provinces, has a good reputation. Bengali is the name given to the cotton of the Ganges valley, and generally to the cottons of Northern India. The Madras cottons are known as Westerns, Cocoadas to the cottons of Southern India. The bales of Comrat and Timerville, the best of these is Timerville. Cambodian cotton has been grown with success in Southern India but it shows a tendency to rot. The prices of cotton realised of recent years have given a great impetus to cultivation. Government have also been active in improving the class of cotton produced, by awarding bounties and the importation of cottonseed. Although these measures have with a considerable measure of success, they have not proceeded far enough for the moment.

India has been the home of the cotton trade from the earliest times. Its colour, known as white wool, was well known to the ancients, and its cloth was familiar to the West in the days of the overland route. The name Calico comes from the fine woven goods of Calicut, and the products of the Decca handlooms are still remarkable as the finest muslin human skill can produce.

Indian Cotton

The exports of Indian cotton began to assume importance with the opening of the sea route. They received an immense stimulus during the American Civil War, when the close blockade of the Confederate ports produced a cotton famine in Lancashire, and threw the English spinners back on India for their supply of raw material. When the war broke out the shipments of Indian cotton were 528,000 bales, but during the last years of the war they averaged 973,000 bales. Most of this cotton was sold at an enormously inflated price, and induced a flow of wealth into Bombay, the great centre of the trade, for which there was no outlet. The consequence was an unprecedented outburst of speculation known as the "Share Mania," and when the surrender of Lee reopened the Southern Ports widespread ruin followed. It is estimated that the surplus wealth brought into the country by the American Civil War aggregated £92 millions. Since then the cultivation of Indian cotton, although interrupted by famine, has steadily increased. For the last season for which returns are available, 1914-15, the total area in all the territories reported on was computed at 24,632,000 acres which marked a net decrease of 183,000 acres or 1.55 per cent on the 25,020,000 acres (revised figure) of the previous year. The total estimated outturn was 5,232,000 bales of 400 lbs as against 5,005,000 bales for previous year, representing an increase of nearly 3.29 per cent. To this figure may be added some 1,000 bales estimated as the production in Native States in Benar and Orissa which make no return.

debar are the chief producing centres. The following table gives the rough distribution of the outturn. The figures are the estimated figures for the past season, and are not exact, but they indicate the distribution of the crop —

Central Provinces and Hyderabad	1,097,000
Bombay and Baroda	1,724,000
Sind	121,000
North-West Frontier	13,000
Punjab	1,474,000
Ajmer-Merwara	13,000
United Provinces	1,343,000
Bengal	35,000
Hyderabad	3,603,000
Assam	12,000
Behar and Orissa	16,000
Burma	48,000

part of a short-staple early maturing variety, suitable to soils where the rainy season is brief. Reference has been made to the popularity of the Indian handloom cloths in the earliest days of which we have record. This trade first attempt to establish a cotton mill in India was in 1838, but the foundations of the industry were really laid by the opening of the first mill at Manchester in 1856. Thereafter, with occasional setbacks from famine, plague and other causes, its progress was rapid.

The following statement shows the quantity (in pounds) of yarn of all counts spun in all India in the twelve months, April to March, in each of the past three years —

1914-15	1913-14	1912-13
448,556,403	479,682,975	485,566,927
138,031,691	44,673,266	44,674,138
31,708,798	38,219,947	37,855,113
50,281,135	44,168,505	43,765,389
6,813,549	6,274,754	5,339,339
34,565,150	36,532,870	33,681,772
38,946,491	37,924,174	37,890,924
651,903,407	682,776,851	688,472,902
GRAND TOTAL		

The spinning of yarn is in a large degree centred in Bombay, the mills of that province producing nearly 75 per cent. of the quantity produced in British India. The United Provinces of Agra and Oudh and Madras produced about 7 per cent. each, while Bengal and the Central Provinces produced 5.5 and 4.7 per cent. respectively. Elsewhere the production is as yet very limited.

Here is a detailed statement of the quantity (in pounds) and the counts, or numbers, of yarn spun in Bombay Island —

1914-15	1913-14	1912-13
88,219,669	89,351,981	95,429,461
162,657,972	186,216,658	188,102,383
66,552,972	74,751,191	74,850,464
4,016,805	3,880,678	4,420,751
599,062	822,287	837,260
105,902	51,911	40,701
322,153,282	355,024,696	363,681,000
TOTAL		

YARN AT AHMEDABAD
The corresponding figures for Ahmedabad are as follows —

1914-15	1913-14	1912-13
2,239,295	1,508,504	2,039,576
21,010,020	14,912,547	15,656,673
39,011,371	30,643,101	37,049,666
8,970,048	11,890,408	11,687,071
252,203	958,218	1,375,446
4,713	144,959	1,662
72,487,652	68,952,737	67,810,194
TOTAL		

YARN SPUN THROUGHOUT INDIA
The grand totals of the quantities in various counts of yarn spun in the whole of India, including Native States, are given in the following table —

Nos 1—10 " 11—20 " 21—30 " 31—40 Above 40 Wastes, &c	TOTAL		
	1912-13	1913-14	1914-15
137,002,274	130,783,748	130,978,122	130,978,122
869,393,232	361,903,914	343,283,826	343,283,826
158,836,811	166,994,607	156,230,374	156,230,374
19,641,700	19,712,298	18,701,101	18,701,101
2,937,880	2,698,686	2,232,668	2,232,668
660,955	678,598	473,216	473,216
688,472,902	682,776,851	651,903,307	651,903,307

In the early days of the textile industry the energies of the millowners were largely concentrated on the production of yarn, both for the China market, and for the handlooms of India. The increasing competition of Japan in the China market, the growth of an indigenous industry in China and the uncertainties introduced by the fluctuations in the China exchanges consequent on variations in the price of silver compelled the millowners to cultivate the Home market. The general tendency of recent years has been to spin higher counts of yarn, importing American cotton for this purpose to supplement the Indian supply, to erect more looms, and to produce more dyed and bleached goods. This practice has reached a higher development in Bombay than in other parts of India, and the Bombay Presidency produces nearly 87 per cent of the cloth woven in India. The United Provinces produces 3·8 per cent, the Central Provinces 5 per cent and Madras about 3 per cent. Grey (unbleached) goods still represent nearly 77 per cent of the whole production, but dyeing and bleaching are making rapid progress.

ANALYSIS OF WOVEN GOODS
The following brief extract is taken from the statement of the quantity (in pounds and their equivalent in yards) and description of woven goods produced in all India, including Native States —

Total— Pounds Miscellaneous— Dozens Pounds Hosiery— Dozens Pounds goods— Yards Pounds Coloured piece goods— Yards Pounds Grey and bleached piece-goods— Yards Pounds	BOMBAY WOVEN GOODS		
	1912-13	1913-14	1914-15
211,111,391	202,763,449	213,576,441	213,576,441
914,181,236	872,443,720	880,501,618	880,501,618
71,828,052	68,839,264	61,067,137	61,067,137
306,251,309	291,845,868	255,266,334	255,266,334
1,812,894	2,166,498	1,733,037	1,733,037
416,133	637,640	512,485	512,485
500,997	471,349	255,918	255,918
284,799	267,411	179,373	179,373
217,663	157,992	341,262	341,262
1,220,442,545	1,164,281,538	1,135,767,952	1,135,767,952
699,032	905,051	691,658	691,658
255,491,002	274,338,550	277,005,800	277,005,800

The output of woven goods during the three years in the Bombay Presidency was as follows:—
(The weight in pounds represents the weight of all woven goods, the measure in yards represents the equivalent of the weight of the grey and coloured goods.)

Pounds Yards Dozens			
	1912-13	1913-14	1914-15
420,203,550	218,042,731	222,153,912	222,153,912
1,001,464,973	941,672,593	922,532,228	922,532,228
135,078	701,205	700,120	700,120

The Textile Industry

The grand totals for all India are as follow —

	1912-13	1913-14	1914-15.
Pounds	285,471,002	274,388,550	277,005,900
Yards	1,220,442,545	1,164,201,588	1,135,707,952
Dozens	690,932	905,051	691,858

TRADE OF THE YEAR.

The depression in the cotton trade which was noticeable before the close of 1913 continued into 1914 and four weeks before the outbreak of war the full effects of a prolonged depression were discernible. Stocks began to pile up and a dozen mills resolved to stop working for some time, although the majority continued to work. Both the spinning and weaving industries suffered throughout the year, and at the close there was no immediate prospect of a large off-take of the accumulated stocks. The problem of the supply of chemicals and dyes, which were regularly obtained from Germany, presented also a serious difficulty on the outbreak of war. The outturn of the mills shows that the production of yarn during 1914-15 was 652 million lbs, a decrease of 31 million lbs or 4.5 per cent, while that of cloth (277 million lbs) increased by 3 million lbs or about 1 per cent as compared with the production of 1913-14. A rough estimate of the value of Indian production in 1914-15 is Rs 303 crores for yarn, and Rs 147 crores for woven goods, the value of local manufactures is less than the imports from abroad by nearly Rs 4 crores.

Indian Production—The production of Indian weaving mills consists chiefly of grey and bleached piecegoods. There was a slight recovery in production during the year. The production of grey and bleached piecegoods increased by 8 million yards to 880 millions, but that of coloured goods decreased by about 36 million yards to 255 millions. In the whole of India 6,634,989 spindles, and 104,180 looms were at work during 1914-15 employing on the average 4,634,870 spindles, 81,411 looms and 175,438 persons. India produced in 1914-15 652 million lbs of yarn, out of which 247 million lbs were consumed in the production of cloth 142 million lbs were exported by sea and land, leaving about 263 million lbs which was probably consumed in the handloom weaving. More yarn is consumed in the country than is exported.

Export Trade—The figures of the export trade are given below —

	Yarn	Goods	Total
	Rs	Rs	Rs
	Million	(lakhs)	(lakhs)
1910-11	183	8.62	2.39
1911-12	151	7.69	2.19
1912-13	204	9.92	2.28
1913-14	198	9.88	2.29
1914-15	134	6.28	1.78

The trade in cotton twist and yarn was bad last year and the demand from most of the consuming countries was poor. The export declined by 64 million lbs or 32.5 per cent.

Piecegoods—The exports of piece goods also contracted by 22 million yards or 24.7 per cent in quantity and by Rs 55 lakhs or 25.7 per cent in value, indicating a decrease in the declared value by 2.2 per cent from 3 annas 10 pies per yard in 1913-14 to 3 annas 9 pies per yard in the year. Grey goods represented 49 per cent of the total, and in this line the trade declined by nearly 11 million yards and Rs 19 lakhs, while coloured goods consumed chiefly of lungies, and saris, representing 50.6 per cent of the total, showing a decline of 11 million yards and Rs 34.3 lakhs. The principal customers are East Africa, the Straits, Aden, Ceylon, Persia, Asiatic Turkey, Siam and Egypt. The trade with China declined from 970,600 yards to 177,200 yards, the other eastern countries showed marked decreases, namely, the Straits by 3 million yards and Rs 12 lakhs, Ceylon by 2½ million yards and Rs 12 lakhs, Siam by 2½ million yards and Rs 7½ lakhs, and Siam by a million yards and Rs 2½ lakhs. Aden recovered from the previous year's depression, the increase amounting to 3 million yards, valued at Rs 4 lakhs while Asiatic Turkey and Egypt recorded a decrease of 8 million yards and 1½ million yards respectively. Persia also took 2 million yards less than in the previous year. Both German East Africa and the British East Africa Protectorate suffered and recorded a decrease of 3½ million yards and 1½ million yards respectively. Handkerchiefs, which are made by the hand looms in the Madras Presidency and are the chief export to the United Kingdom, improved slightly.

Statement of the amount in rupees of Excise duty realised from goods woven in the Cotton Mills in British India, under the Cotton Duties Act, 1880, also the amount of equivalent duty levied in the Native States, in each year from 1895-96 to 1912-13

Central Provinces and Berar (a)	Punjab	United Provinces of Agra and Oudh (also Ajmer-Merwara)	Bengal	Madras	Bombay
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1895-96 (b)	1896-97	1897-98	1898-99	1899-1900	1900-01	1901-02	1902-03	1903-04	1904-05	1905-06	1906-07	1907-08	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15 (c)
186	914,480	9,60,600	11,26,390	10,95,236	10,28,542	15,26,103	15,84,121	17,64,527	20,43,832	22,78,425	24,36,265	28,82,296	29,51,859	33,88,658	36,78,555	42,17,878	48,27,698	46,68,188	42,81,544
496	56,300	66,470	89,130	88,678	41,827	54,139	67,813	62,350	65,379	1,10,943	1,32,693	1,35,181	1,42,295	1,45,383	1,48,136	1,65,048	2,06,862	2,13,166	1,79,569
69	4,480	1,180	900	2,523	5,038	6,863	6,005	10,908	11,929	11,165	23,709	31,556	53,351	55,822	56,359	48,631	81,709	78,951	53,028
4,250	45,870	44,350	61,000	64,818	50,110	69,284	74,023	89,189	99,710	1,32,364	1,35,884	1,66,044	1,88,345	1,92,552	1,82,083	1,84,653	2,11,847	2,53,467	2,07,454
615	13,270	14,460	12,730	10,448	5,806	4,379	3,031	1,104	2,607	5,144	7,464	8,746	9,509	6,611	7,300	10,862	17,971	22,353	10,285
	89,040	79,269	84,069	88,100	84,978	1,10,140	1,30,920	1,56,371	1,61,368	1,68,743	1,64,680	1,76,944	1,98,419	2,17,217	2,07,818	2,52,415	2,71,882	3,00,919	2,52,282

Total British India	Net duty	Gross duty	Native States	Grand Total	Net duty
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1895-96 (b)	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1896-97	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1897-98	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1898-99	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1899-1900	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1900-01	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1901-02	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1902-03	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1903-04	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1904-05	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1905-06	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1906-07	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1907-08	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1908-09	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1909-10	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1910-11	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1911-12	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1912-13	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1913-14	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545
1914-15	5,635	11,29,440	10,91,690	18,459	244	5,879	11,41,899	11,10,049	14,86,785	12,14,164	14,27,305	13,50,451	12,11,596	17,77,965	18,91,010	20,85,149	24,06,976	27,64,516	29,82,671	29,46,152	34,53,443	36,12,977	40,93,719	44,56,129	49,86,971	50,61,957	58,39,147	56,77,436	51,67,322	51,12,545

(*) From the 1st October 1902 from which date the province was leased in perpetuity to the British Government
(b) For February and March 1896
(c) Provisional

The Jute Industry

Considering its present dimensions, the jute industry of Bengal is of very recent origin. The first jute mill in Bengal was started at Rushra in 1855, and the first power-loom was introduced in 1859. The original output was 8 tons per day. In 1909 it had grown to 2,500 tons per day, it is now 3,000 tons per day (working short time), and it shows every indication of growing and expanding year by year. Another interesting thing about the jute industry of Bengal is that, although it is practically a monopoly of Scotsmen from Dundee, the industry itself owes its inception to an Englishman. The founder of the industry was George Acland, an Englishman, who began life as a midshipman in the navy, and was some years in the East India Marine Service. He quitted this service while still a young man, and engaged in commercial pursuits in Ceylon, where he was successful. Later on he turned his attention to Bengal, and arriving in Calcutta about 1853 he got into touch with the management of the paper works, then at Serampore, where experiments were being tried with country grasses and Abies plants to improve the quality or cheapen the manufacture of paper. This seems to have suggested to Acland the manufacture of ream, and in 1854 he proceeded to England, with a view to obtaining machinery and capital in order to manufacture goods from that material. During this trip he visited Dundee, and while there Mr John Kerr, of Douglas Foundry, suggested to him the importing of machinery into Bengal, "where the jute comes from and for shortly afterwards Acland placed orders with Kerr for a few systems of pressing and spinning machinery, and returned to India the same year accompanied by his two sons and a few Dundee mechanics who were to assist him in erecting and operating the first jute mill in Bengal. This, as has been stated, was at Rushra, the site of the present Tellington mill, near Serampore, and here, in 1855, the first machine spun jute yarns were made. As not infrequently happens the pioneer got very little out of his venture. After several years and down the Acland interest in the Rushra mill ceased in 1867, and the company which Acland had formed in 1854 was wound up in 1868.

Power-loom.—The pioneer's example was followed by Mr George Henderson of that ilk and firm, and in 1859 the Borneo Jute Co. was launched under his auspices. To this company is due the credit of introducing the power-loom for jute cloth. Unhappily by the financial difficulties which had burdened the Aclands, the Borneo Jute Co. made rapid progress, doubling their works in 1864, and clearing their capital twice over. In 1872 the mills were turned into a limited liability company, the present "Barnagore Jute Manufacturing Co., Ltd." Four other mills followed in succession—Gourapore, Serajung, and India Jute Mills.

"From 1863 to 1873," writes Mr David Wallace in "The Romance of Jute," "the five mills excepting the Rushra mill simply after which came the following series of new, witnessed large excursions to the existing mills, A full of four years National, Delta (which absorbed the Seraj-Ailance, Arathoon, Anglo-India, Standard, India), Kharada, Gondopara (French owned), with 1,800 spindles (now acquired by Anglo) were started—the Gordon Twist Mill between 1896 and 1900 the following new into the Wellington branch of the Champdany Twist Mill, with 2,460 spindles, since merged mills came into existence except the Calcutta 6,700. From this period on to 1894 no new bringing the number of looms at work up to Tirahat, Victoria and Rankmarsh mills, total was further augmented by the Hooghly up to 5,150 in 1882. By the end of 1883 the of the other mills, brought the total looms muli, together with additions made by some Jardine, Skinner & Co. to his own firm. This the agency of the Gourapore Co. from Messrs into being in 1877, as the result of Mr Barry's by Messrs Jardine, Skinner & Co., which came was put up. This was Kamahatti, promoted Between 1876 and 1882 only one new mill badly and management Fort Gloster also suffered bund, to appear again later on under new names turning Co. and the Rustomjee—became most Asiatic, the Bengal Pressing and Manufacturing Co. of the new concerns—the Oriental, but The older ones all survived the ordeal, but ten years all the mills had a severe struggle strain for the new industry, and for the next 1,250 up to 3,500. This was too much of a in all thirteen new companies, coming on all Messrs Birmyre Bros, of Greenock fame—tered in England, and Hastings, owned by Rustomjee (now the Central), Ganges (regis- the Bellaghat-Burnagore branch mill), Bengal Pressing and Manufacturing Co (now (now Union), Asiatic (now Soorah), Clive, mills were launched—the Howrah, Oriental operations in 1874, all of which commenced day and Samungger, all of which commenced Sripore, and two Home companies, the Champ- locally—the Fort Gloster, Budge Budge and In 1872-73 three new companies were floated noon the shares snapped up in the course of an after- issue a prospectus of a jute mill to have all just enjoyed a boom, it was only necessary to return than coal or tea, both of which had industry in 1872-73 seeming to offer a better Canning bubble, and the condition of the jute in public had forgotten the effect of the Port per cent. When came a change. The invest- cent, for 1874, 20 per cent, and for 1873 10 per cent, for 1874, 20 per cent, and for 1873 10 per cent premium. The dividend for the first year, ending August 1873, was 25 per cent. On the working of their first half Company. On the working of their first half take the dividends paid by the Barnagore per cent of the industry at this period we may rooms up to 1,250." To illustrate the pros- coined money and brought the total of their

The Jute Industry

mills, besides further heavy extensions—Dallages from the earliest year for which complete information is available with accuracy for the last five years, and the figures in brackets represent the variations for each period, taking the average of the quinquennium from 1879-83 to 1883-87 as 100. It will be seen that the number of looms and spindles in operation has increased to a very much larger extent than either the number of mills at work or the amount of nominal capital employed. The following statement shows quinquennial averages.

Progress of the Industry.

Number of mills at work	Nominal Capital (in lakhs of Rs.)	Persons employed	Looms	Spindles
21 (100)	270 7 (100)	38 8 (100)	7 5 (100)	53 (100)
24 (114)	341 6 (126)	52 7 (136)	7 (127)	138 1 (157)
31 (145)	402 6 (149)	64 3 (166)	5 7 (151)	172 6 (196)
36 (171)	522 1 (193)	96 7 (222)	11 7 (21)	244 8 (272)
46 (219)	650 (251)	114 2 (294)	16 2 (293)	346 (399)
60 (256)	900 (333)	165 (425)	24 8 (151)	510 5 (750)
78 (276)	1,151 (425)	201 1 (520)	31 4 (371)	612 9 (774)
99 (281)	1,193 (441)	216 4 (557)	32 9 (598)	652 5 (776)
61 (250)	1,196 5 (442)	201 0 (519)	34 (618)	705 7 (809)
64 (303)	1,309 (446)	216 (557)	36 (551)	744 (860)

The production of the mills has increased to a still greater extent than the number of mills at work, and shows the report of jute manufactures and the declared values for the quinquennium 1894-98.

Quantity in millions of bales	Quantity in lakhs of bales	Quantity in lakhs of bales
1879-80 to 1883-84	1384-85 to 1888-89	1889-90 to 1893-94
1384-85 to 1888-89	1394-95 to 1898-99	1899-1900 to 1903-04
1394-95 to 1898-99	1904-05 to 1908-09	1909-10
1909-10	1910-11	1911-12
1911-12	1912-13	1913-14

Up to the last quinquennium the exports of raw jute were marked by increases from year to year though the improvement was not so rapid as in the case of manufactures. A slight decrease in the exports occurred in 1909-10 as compared with the figures for the preceding quinquennial period and a further decline in 1910-11, but a marked recovery was made in 1911-12 which was accentuated in 1912-13 —

Jute, raw, in millions of cwt

1879-80 to 1883-84 (100) 7 5

1884-85 to 1888-89 (119) 8 9

1889-90 to 1893-94 (133) 10

1894-95 to 1898-99 (164) 12 3

1899-1900 to 1903-04 (169) 12 7

1904-05 to 1908-09 (201) 15 09

1909-10 (195) 14 6

1910-11 (169) 12 7

1911-12 (216) 16 2

1912-13 (233) 17 5

1913-14 (205) 15 4

The price of raw jute reached its highest point in 1906-07, the rate being Rs 65 per bale, and in 1907-08 it dropped to Rs 42 per bale, and the fall was accentuated in 1908-09 and 1909-10, the price having declined to 36 4 and Rs 31 per bale respectively. In 1910-11 the price rose again to Rs. 41-8-0, to Rs 51-4-0 in 1911-12 and further to Rs 54-12-0 in 1912-13. The following are the quinquennial average prices per bale (400 pounds) of ordinary jute calculated from the prices current published by the Bengal Chamber of Commerce —

1913-14 1913-14

1912-13 1912-13

1911-12 1911-12

1910-11 1910-11

1909-10 1909-10

1899-1900 to 1903-04 1899-1900 to 1903-04

1889-90 to 1893-94 1889-90 to 1893-94

1884-85 to 1888-89 1884-85 to 1888-89

1879-80 to 1883-84 1879-80 to 1883-84

1913-14 1913-14

1912-13 1912-13

1911-12 1911-12

1910-11 1910-11

1909-10 1909-10

1899-1900 to 1903-04 1899-1900 to 1903-04

1889-90 to 1893-94 1889-90 to 1893-94

1884-85 to 1888-89 1884-85 to 1888-89

1879-80 to 1883-84 1879-80 to 1883-84

1913-14 1913-14

1912-13 1912-13

1911-12 1911-12

1910-11 1910-11

1909-10 1909-10

1899-1900 to 1903-04 1899-1900 to 1903-04

1889-90 to 1893-94 1889-90 to 1893-94

1884-85 to 1888-89 1884-85 to 1888-89

1879-80 to 1883-84 1879-80 to 1883-84

1913-14 1913-14

1912-13 1912-13

1911-12 1911-12

1910-11 1910-11

1909-10 1909-10

1899-1900 to 1903-04 1899-1900 to 1903-04

1889-90 to 1893-94 1889-90 to 1893-94

1884-85 to 1888-89 1884-85 to 1888-89

1879-80 to 1883-84 1879-80 to 1883-84

The 1915 crop — During the past year much damage was done to the crop by floods, and there was an estimated decrease in the average underjute, mainly in Eastern Bengal, of 981,421 acres. The final figures of outturn for the three provinces work out as follows —

Province	Bales		Decrease
	1914	1915	
Bengal—			
Western	1,347,698	1,051,399	286,299
Northern	2,734,433	1,975,539	758,894
Eastern	5,235,887	3,470,128	1,756,759
Cooch Behar	135,487	72,335	62,002
Bihar and Orissa (including Nepal)	780,787	697,873	82,914
Assam	307,463	157,459	150,004
Total	10,531,505	7,428,733	3,102,772

Price of jute, ordinary, per bale of 400 lbs

Rs a p

23 8 0 (100)

23 3 2 (99)

32 6 5 (138)

30 12 0 (131)

32 1 7 (137)

44 13 6 (191)

31 0 0 (132)

41 8 0 (177)

51 4 0 (218)

54 12 0 (233)

76 12 0 (327)

The average prices of gunny cloth have been as follows —

Rs a p

10 7 11 (100)

8 0 7 (77)

10 6 6 (99)

9 11 8 (93)

10 2 10 (97)

11 14 1 (112)

9 3 6 (88)

9 5 6 (89)

11 14 0 (113)

16 6 0 (156)

17 0 0 (162)

Price of Hessian cloth 10 1/2oz 40" per 100 yds

Estimated acreage under Jute

Name of province

1914

1915

Decrease

Bengal—	Western	Northern	Eastern	Cooh Bihar	Bihar and Orissa	Azam	Total
169,830	297,309	591,365	1,150,403	27,356	215,339	82,100	3,349,437
264,126	591,365	1,549,894	44,413	333,120	102,300	19,200	2,365,151
934,286							

The Jute Mills Association now one of the most important, if not the most important, of the bodies attached to the Bengal Chamber of Commerce, was started under the following circumstances—In 1886 the existing mills, finding that in spite of the constant opening up of new markets, working results were not favourable, came to an agreement with the late S. E. J. Clarke, Secretary to the Chamber of Commerce, as trustee, to work short time. The only mills which stood out of this arrangement were the Hooghly and Serajunge. The first agreement, for six months dating from 15th February 1886, was subsequently renewed at intervals without a break for five years up to February 15, 1891. The state of the market at the time of the renewals dictated the extent of the short time, which varied throughout the five years between 4 days a week, 9 days a fortnight and 5 days a week. Besides short time, 10 per cent. of the sacking looms were shut down for a short period in 1890. An important feature of this agreement was a mutual undertaking by the parties not to increase their spinning power during the currency of the agreement, only a few exceptions being made in the case of a few incomplete new mills.

Working days—With the introduction of the electric light into the mills in 1896, the working day was increased to 15 hours, Saturday included, which involved an additional amount of cleaning and repairing work on Sundays in order to minimise this Sunday work and give them a free Sunday, an alternative was got up in 1897 by the Mill European assistants to have the engines stopped at 2 or 3 p.m. on Saturdays. The local Government took the matter up, but their action went no further than applying moral suasion, backed by a somewhat half-hearted threat. The Mill Association held meetings to consider the question and the members were practically agreed as to the advisability of early closing on Saturdays, but, *more so*, could not trust themselves to carry it out without legislation. Unfortunately the Government of India refused to sanction the passing of a Resolution by the provincial Government under the Factory act and the matter was dropped. Only a year

Effect of the War—The official review of the trade of India in 1914-15 says—It will be remembered that among the circumstances which added materially to the rapid development of the world's jute industry were the Criméan war in 1854-56 and the Civil war in America in 1861-63. It was anticipated on the outbreak of war that history would repeat itself, and that there would be a large demand for manufactured jute, especially for military and transport purposes. This anticipation was fulfilled and by the end of the year under review Calcutta jute mills were never in a more prosperous state. The short time agreement among the Bengal mills to work five days a week from April 1914 came to a conclusion at the end of September. From the 3rd October the mills commenced a six day week, some of them on the full double shift of 13½ hours and others on 11 hours single shift. The result of the exceptionally high level at which jute and jute goods had until then been selling had not only been to curtail the competition of jute goods, but also to bring substitution for jute such as textile and textile, with a

Association for the year
Mr George Morgan to be the Chairman of the
A. Tosh, The Committee have since elected
P. E. Suttie, G. S. Alexander, G. Morgan, and
namely—Messrs R. L. B. Gall, C. D. Stewart,
gentlemen was elected for the year 1915-16,
when a Committee consisting of the following
general meeting was held on the 1st October,
mills in and around Calcutta. The first annual
Dealers Association, has lately been formed
in Calcutta to promote and to guard the com-
mon interests of its members as dealers in jute
for local consumption. The members are
bailers and brokers of jute for sale to the jute
mills in and around Calcutta. The first annual

the region of possibility. When, however, the price of the raw material reached its lowest level, most of the mills took advantage of the situation, and secured large stocks of cheap jute. The demand for manufactured goods was not active, and as a consequence the mills were unable to sell goods against their purchases. But later on the mills sold again their purchases at a large profit, especially after October, owing to the fact that during the latter half of the year a large amount of jute goods were manufactured to an extent which had never been previously known in India, and it is likely that as long as the war continues the mills here will be kept fully employed.

The extent of the jute industry and its importance to India may be gathered from the figures of the export of the manufactured articles —

Value of jute goods Rs. (lakhs)	28,27	25,82
Hope	1,000 cwt	83
Cloth	1,061	1,057
Yards	369	388
No. millions	369	388

1913-14 1914-15

During the year the exports amounted to nearly Rs 26 crores or £17 millions, representing about 56 per cent of the total value of exports of the articles wholly or mainly manufactured and about 15 per cent of the total exports of Indian merchandise. In the pre-war period the exports amounted to nearly Rs 9 crores (56 millions) or 56 per cent of the year's trade in jute manufactures, against Rs 8½ crores (£5½ millions) in the corresponding period of 1913-14. In the war period the value fell from Rs 20 crores (£13½ millions) to Rs 17 crores (£11½ millions), the decline being due not to a smaller volume in trade but to a great decrease in the price of finished goods in sympathy with lower prices of the raw material. The exports of gunny bags and gunny cloth amounted to 388 millions and 1,057 million yards respectively, against 369 millions and 1,061 million yards in 1913-14, the figures for the war period being respectively 267 millions and 715 million yards against 243 millions and 742 million yards in the corresponding period of 1913-14.

GLASS AND GLASSWARE

The total value of glass and glassware imported into India in 1914-15 fell by Rs 117 lakhs to Rs 142 lakhs, about 58 per cent of which trade was effected in the pre-war period. Hitherto Australia-Hungary has stood first among the exporting countries, and Germany has been second. During the year the value of Japanese imports of glass into India has increased by Rs 37 lakhs to Rs 19½ lakhs.

India consists of two well defined classes, the indigenous household industry and the modern factory industry. The indigenous household industry, which is represented in all parts of the country, is chiefly concerned with the manufacture of cheap bangles. Glass manufacture in India on the modern factory system has hitherto been an uphill struggle against great difficulties. In Bengal, the Pioneer Glass Manufacturing Company, Limited, of Litigah, started work in 1890 and the Bengal Glass Company of Soda put in 1898. They ceased working in 1899 and 1902, respectively. The Madras Glass Works founded in 1909 has ceased work, though it is hoped to restart it. A factory started in Hyderabad also proved a failure and its plant was taken over by the Glass Works at Ambala. The Himalayan Glass Works at Rajpur in the Dehra Dun district closed after three or four years' working in 1908, but was restarted later under new management. Finally, the Upper India Glass Works at Ambala, which was started by Indian capitalists in 1895, was at first a failure. Since 1903, however, it has been much more successful. It established itself firmly in its earlier years by specialising in the manufacture of glass bottles. It has been much more successful in imported from England there is no reason to anticipate any shortage of the supply. It is also probable that soda compounds will in time be locally manufactured in India.

The Handloom Weavers.

By F Booth Tucker

Next to agriculturists the handloom weaver of India ranks second in numerical importance among her skilled industrial workers. In round figures about 11 million souls are dependent on this industry. From a position of prosperity and even affluence they have suddenly been reduced, through no fault of their own, but by circumstances over which they have no control and which it was impossible for them to foresee, to a condition of indigence and even starvation. Taking a superficial view of the situation one might be tempted to say that the remedy is in their own hands. Let them forsake their homes and take service in the mills and the problem will be solved. But this would be a short sighted and unwise policy. There are fundamental objections to it which cannot be overlooked.

What the handloom industry of India calls for is not annihilation, but leadership. To invite a noble and ancient industry which has been for many ages one of the main bulwarks of India's prosperity voluntarily to commit itself to a "sacrifice of self" is a little like asking a man to give up his own life for the sake of the world. The mill owners of Lancashire would no doubt benefit greatly—at least for the time being—if they could persuade the foolish mill owners of India that in view of Lancashire's superior skill, intelligence, education, capital or other causes, the latter ought promptly to commit suicide, and if they could persuade up the industry in its unequal struggle they were embarking in a wasteful and useless expenditure of money and energy, and that their proper course would be to tax it out of existence or at least abandon it to its fate!

Training Schools

Unfortunately in the case of the voiceless handloom weavers the mill interests have to a large extent overruled Government that it is useless to help them to sustain the unequal struggle. Nearly every handloom weaver's school in India and elsewhere has sooner or later been converted into a training school for mill foremen and managers, as—plunging to salaries of from Rs 50 to Rs 500. What wonder when it is remembered that the managers of these institutions have been almost without exception themselves trained in mill schools to mill methods, and have become accustomed to look down upon the handloomed to extinction.

Similarly, when Government have appointed experts, or committees, to investigate the question and to report on the advisability and best means of helping the handloom weaver, to whom has the duty been entrusted? Almost invariably to mill experts, whose verdict has been a foregone conclusion. They might well have saved themselves the trouble and expense I have sometimes written to such persons myself and urged them to confer with our own experts, who have been engaged in the exclusive study of the problem for the last 7 or 8 years, or to allow me an opportunity

of presenting personally the handloom weavers' side of the story, and almost without exception they have been too busy, or have been unable to visit the centres suggested, or have paid them a cursory and contemptuous call while a more or less one-sided report has been presented, which has frequently resulted in Government withholding its much-needed help from this struggling community and further generously subsidising the wealthy mill-schools!

Not that the two interests are necessarily opposed to each other, any more than are the Infantry and Cavalry of an army in the field. While Indian mills are looking abroad for markets for their yarn, the 11 million skilled weavers at their door are well worthy of their share in the requirements of this home field. Invaluable markets for their output. Mills that need not look outside the four corners of India for many a year to come.

What is wanted

What the handloom weavers of India need is —

- 1 Leadership. They are like sheep without a shepherd. The few leaders that have hitherto been supplied them have too often been wolves in sheep's clothing, who have failed either to understand their needs, or win their confidence.
- 2 The second great need is instruction in improved methods.
- 3 The weaver must also be placed in touch with the markets of the world.
- 4 This will involve a generous expenditure of money by Government in doing for the weaver what he obviously cannot do for himself. But the outcome will abundantly repay the outlay.

Properly led, properly instructed and properly connected with the world's great cloth bazaar, the weaver of India may yet again become India's pride, and the merchants of the world may yet again vie with one another in seeking the products of his age-old loom. The task is not nearly so difficult as it seems. The machinery exists, but needs extension and expansion. There are some things which the weaver can, must and will do for himself. There are other things which must be done for him.

Leadership

He must be supplied with Leaders who know his needs and in whom he can safely trust. These leaders ought not save under exceptional circumstances, to be chosen from his file. The mill-trained expert is, as a rule, of very little use to him and is often a positive source of danger. The leaders whom he needs must be in thorough sympathy with his cause, must understand his conditions, must include those who are able to handle the shuttle and must not be mere students and theoreticians. And here I would like to say that it is highly dangerous for a

Presidency, or State to allow its policy to-

wards the handloom weaver to be dictated by

a young graduate from a mill school. We

should not dream of putting the cleverest

University Graduate to fill the chair of a Com-

missioner or to dictate the policy of Govern-

ment, because he had gained honours in Poli-

tical Economy, Science, Languages or other

elements of knowledge. And yet in not a few

instances the destinies of the vast weaving

community have been entrusted to the guidance

of the mercer tyros in this difficult art! What

wonder that the ship has soon been wrecked

and consequently abandoned, and then the

cause regarded as hopeless.

The great majority of these I leaders will

have to be selected from the weavers them-

selves and not from callow unbledged students

of the theory of their art.

Suitable Schools Needed.

2 Therefore they must have suitable

Schools I say suitable because many of the

schools established for their benefit have been

anything but suitable. Frequently it has

been necessary to close them for this very

reason. The founder of one such brought

the Governor of his Presidency to warn the

weavers that if they failed to drink at the

fontain of textile knowledge which Govern-

ment had at great expense established for

them, it would be his painful duty to stop it

unvalued flow. One man could lead them to

the unwilling horse to drink. Soon after-

wards the institution was closed, and the

weavers of course were blamed for their stu-

pidity.

By a suitable school I mean,

(1) A school that is under the sympathetic

management of a leader who understands the

weavers' needs and can win their confidence.

(2) A school in which the teachers can them-

self weave and can consequently be looked

to by the weavers.

(3) A school exclusively for weavers and not

for mill-students, nor a combination of the two

A school in which the adult weaver is taken

by the hand and taught improved methods

of courses, reasonable limits. He may not be able

to read, or write, but when it comes to ques-

tions of his own particular art, he will usually

exhibit a shrewdness, alertness and common-

sense, which should be developed and encour-

aged.

(4) Being a family man, the adult weaver

must receive such remuneration as he may

require for the support of his family, while

learning improved methods.

(5) The school must be in close touch with

the world's markets and must teach the weaver

the kinds of cloth that it will pay him to make

The weaver is always awake to the commercial

side of his undertaking, and will appreciate

such assistance. The mere theoretical peda-

gogue is bad enough in an ordinary educational

system, standing too often out children's heads

with useless knowledge, but in a weaving

school he spells ruin to its best interests

(6) The weaver ought to be helped by means

of loans and time payments to become the

owner of the improved implements of which

he has been taught the use, should he so desire

himself prefers and should be enabled to pay

for them by instalments.

(7) Travelling branches should be establish-

ed which can go from village to village a regu-

lar intervals, explaining methods, invit-

ing criticisms, establishing centres and being

able to market the produce of the weavers and to

obtain for them good yarn at reasonable prices.

Marketing of Produce

3 The marketing of produce is not so

difficult as might at first sight appear. Each

centre should gradually work up a market

of its own and when one line ceases to yield

a reasonable profit, another should be substituted,

as the weavers become better organized and

trained, the market will gradually run after

them.

We have ourselves established in connec-

tion with our various weaving schools a trading

agency which takes over the whole of their

output and whose business it is to find out

what the markets require. It works on a

strictly business basis and greatly facilitates

the working of our schools.

It is now some eight years since the Salva-

tion Army took up the cause of the handloom

weavers of India and I think that we may

claim to have gained a thorough working

knowledge of their needs, and to have largely

won their confidence.

One of our Officers has invented a loom which

has been generally accepted as the best and

latestest handloom in existence. What is even

more important, it works so easily that a child

can use it. Thus all the members of a weaver's

family can work it in turn and bring their out-

puts for throwing the shuttle can be obtained

from Rs 7, and upwards, and the complete

loom from Rs 35 and upwards.

A fast loom is of no use to a weaver without

a warping machine that can turn out long warps

For this we have a very simple device suitable

for village use. The warping machine can

keep some twenty fast looms supplied with

warps. The cost of this machine is only Rs 35

The preparation of thread from cotton,

wool, or silk has also received our attention,

and improved methods have been introduced

which are greatly appreciated by the weavers

and villagers. Improved spinning and reeling

machines can be obtained for Rs 15 and

upwards.

The price of the implements has been brought

down to the lowest point consistent with good

workmanship and materials. The strain upon

a first loom is very severe, and unless it is well

made it soon goes to pieces. The weaver

themselves well understand this and prefer a

good machine, even if it costs more.

Stik.

In the early days of the East India Company the Indian silk trade prospered greatly, and various sub-tropical races of the Silkworm were introduced. But the trade gradually declined for the following reasons —

In the seventeenth and eighteenth centuries India's chief competitor in the silk trade was the Levant Company. Successful efforts, however, were made to acclimatize in Europe one or two races of a temperate worm, procured from China and Japan. When sericulture became part of the agriculture of France and Italy, a quality of silk was produced entirely different from that of India and Turkey, and its appearance created a new demand and organized new markets.

It is subsequent experience seems to have established the belief that the plains of India, or at all events of Bengal, are never likely to produce silk that could compete with this new industry. On the lower hills of Northern India, on the other hand, a fair amount of success has been attained with this (to India) new worm, *Bombyx mori*, possibly obtained from China. In Manipur, it would appear probable that fashion has, from time to time, powerfully modified the Indian silk trade. The special properties of the *Korah* silk were formerly much appreciated but the demand for them has now declined. This circumstance, together with defective systems of rearing and of handling and weaving, accounts largely for the present depression in the mulberry silk trade of India.

silva (the mulberry of the European silk producing countries), are grown especially as food for the silkworm. This is the case in many parts of the plains of Northern India, Baluchistan, Afghanistan, Kashmir, and along the Himalaya at altitudes up to 11,000 feet. The other species are more largely grown for the Indian silkworm. It is *Indica* of which there are many distinctive varieties or races. This is the most common mulberry of Bengal and Assam as also of the Nilgiri hills.

India has three well-known purely indigenous silk-forms, the *tasar*, the *muga*, and the *eri*. The first is widely distributed on the lower hills, more especially those of the great central table-land, and feeds on several jungle trees. The second is confined to Assam and Eastern Bengal, and pupates in a cocoon. The third exists in a state of domestication, being reared on no other plant. From an art point of view the *muga* silk is the most interesting and attractive, and the cocoon can be reeled readily. The *eri* silk, on the other hand, is so extremely difficult to reel that it is nearly always carded and spun—an art which was practised in the Khasi hills of Assam long before it was thought of in Europe.

Experiments and results—Numerous experiments have been made with a view to improving sericulture in India. French and other experts are agreed that one of the causes of the decline of the silk industry in India has been the prevalence of diseases and parasites among the worms, the most prevalent disease being pedicline. At Latur, who has conducted experiments in cross breeding, believes that improvement in the crops will be obtained as soon as the fight against pedicline and other diseases of the worms is taken up vigorously by the producers of seed and the rears of worms, while improvement in the quality of the cocoons will be obtained by rearing various races, pure and cross breeds.

In Kashmir and Mysore satisfactory results have been obtained in the former State sericulture has been fostered on approved European principles with Italian reeling mach-

provice to be supplied under Government supervision. It is believed that this is the only really effective method of dealing with the problem. A number of the existing smaller nurseries were closed during 1913 and others are being converted into enlarged and improved central nurseries with rearing houses complete. The ultimate success of the scheme depends largely on the willingness of the rearers to pay an adequate price for pure seed.

A pamphlet was published in 1915, by Mr. N. De, Srivastava, Assistant at Pusa, which contains practical hints on improved methods which are recommended to be used for reeling mulberry silk in Bengal and other silk producing districts. It has been found that, by the provision of two small machines to the ordinary Bengal type of reeling machine, the ordinary can be obtained, the cost of the extra apparatus is merely nominal (five or six annas per machine) whilst the suitability of the machine for cottage workers is maintained. By attention to such simple points as the siting and storage of cocoons and the temperature and quality of the water used in the reeling process, great improvement can be effected in most silk centres in Bengal and other districts.

Exports of Silk.—The exports of raw silk, both from mulberry and non-mulberry reeling silkworms, in 1914-15 amounted to 82,700 lbs valued at Rs 3 lakhs, against 160,200 lbs valued at Rs 15½ lakhs, in 1913-14, while the value of chasam (waste) and cocoons fell from 1,042,900 lbs valued at Rs 9½ lakhs, to 438,600 lbs valued at nearly Rs 4 lakhs, the total value of raw silk (including chasam and cocoons) declined by 52 per cent to Rs 12½ lakhs. The decrease is most marked in the exports to France (which usually takes 70 per cent of Indian raw silk) from 712,110 lbs to 187,209 lbs, while those to the United Kingdom rose from 276,502 lbs to 287,630 lbs. The fluctuations are attributable to the war.

The export of silk manufactures in 1914-15 was valued at Rs 3½ lakhs as compared with Rs 5½ lakhs in 1913-14. Mixed goods accounted for a loss of Rs 80,000 and piecegoods or Rs 1½ lakhs. The United Kingdom, the chief customer of Indian silk piecegoods, took 80,200 lbs worth Rs 77,000 in place of 162,800 lbs valued at Rs 1½ lakhs in 1913-14.

Imperial Silk Specialist.—At the end of 1915 it was decided that the first step to be taken to revive the silk industry should be the employment of a qualified expert who, after a careful study of the conditions not only in India but in other silk-producing countries will formulate recommendations for the consideration of Government. With the approval of the Secretary of State, Mr. H. Maxwell, now Professor at the Imperial College of Science and Technology, South Kensington, has been appointed to the temporary post of Imperial Silk Specialist.

Central Nurseries.—The report of the Agricultural Department, Bengal, for the year ending June 30, 1913, gives an account of a scheme which has been devised with the object of reclaiming the silk industry. The aim of the scheme is gradually to establish throughout the silk districts a sufficient number of central nurseries with rearing houses and thus enable the whole of the seed cocoons required in the

present by the multivoltine races which are reared at both in quality and output than that supplied by the multivoltine races which are reared at Pusa in the year 1910 and have since been carried on in the endeavour to fix a superior multivoltine race of the Mulberry silkworm which would not degenerate and which would yield silk better than to receive the silk industry should be the employment of a qualified expert who, after a careful study of the conditions not only in India but in other silk-producing countries will formulate recommendations for the consideration of Government. With the approval of the Secretary of State, Mr. H. Maxwell, now Professor at the Imperial College of Science and Technology, South Kensington, has been appointed to the temporary post of Imperial Silk Specialist.

In 1915 there was issued by the Agricultural Research Institute, Pusa, a Bulletin (No. 48 of 1915) entitled "First Report on the Experiments carried out at Pusa to improve the Mulberry Silk Industry." In a short Preliminary note Mr. Bainbridge Fletcher (Imperial Entomologist) explains that the object of the Bulletin is to place on record some of the more important experiments which were commenced at Pusa in the year 1910 and have since been carried on in the endeavour to fix a superior multivoltine race of the Mulberry silkworm which would not degenerate and which would yield silk better than to receive the silk industry should be the employment of a qualified expert who, after a careful study of the conditions not only in India but in other silk-producing countries will formulate recommendations for the consideration of Government. With the approval of the Secretary of State, Mr. H. Maxwell, now Professor at the Imperial College of Science and Technology, South Kensington, has been appointed to the temporary post of Imperial Silk Specialist.

Indigo.

the Agricultural Research Institute, Peramp-
the most important problem for the natural
Indigo trade to solve is the marketing of the dy-
Indigo, according to a British Dyer whose views
are entitled to respect, dyes a lighter shade than
either synthetic indigo or indigo refined
from plant-indigos. It is further stated that
than 70 per cent Dutch-Java
Decline of the Industry—Since synthetic
Indigo was put upon the market, in 1897, the
natural indigo industry of India has declined
very rapidly, apart from slight recoveries in
1900-07 and 1911-12, the decline continued
without a break until the revival due to the
impossibility of obtaining artificial dyes in
sufficient quantities during the war. The
figures for the last few years may be contrasted
with those for the five years ending in 1897, in
which the area under indigo averaged 2,400
square miles and the value of the exports over
£3,000,000 a year

Area under Indigo	Quantity Exported	Value of Exports
Acres	Cnts	£
1901-02	791,000	1,234,537
1902-03	646,000	803,708
1903-04	707,000	717,408
1904-05	477,000	536,403
1905-06	384,000	330,918
1906-07	421,000	466,985
1907-08	594,000	424,810
1908-09	284,000	226,986
1909-10	289,000	234,314
1910-11	276,000	223,529
1911-12	271,000	250,535
1912-13	220,000	147,000
1913-14	176,000	142,000

Present Position—The crop is most im-

portant in Bihar and Madras, in the Punjab
and United Provinces it now occupies little over
100 square miles altogether. In Bengal the
crop is largely raised by British planters, in the
other provinces chiefly by native cultivators.
Scientific research work on questions connected
with cultivation and manufacture has been
carried out by the Bihar Planters' Association.
In 1897 it is hoped that good results may be
obtained from the biological line of work—
up But the official "Review of the Trade
or India in 1913-14" says that "it would seem
probable that unless great improvements can
be effected in cheapening the method of pro-

Indigo dyes are obtained from the Indigofera,
a genus of Leguminosae which comprises some
300 species, distributed throughout the tropical
and warm temperate regions of the globe,
India having about 40. Western India may
be described as the headquarters of the species,
so far as India is concerned, 25 being peculiar
to that Presidency. On the eastern side of
India, in Bihar, Bengal, Assam and Burma,
there is a marked decrease in the number of
species but a visible increase in the prevalence
of those that are met with
There is evidence that when Europeans first
began to export the dye from India, it was
procured from the Western Presidency and
shipped from Surat. It was carried by the
Portuguese to Lisbon and sold by them to the
dyers of Holland, and it was the desire to
obtain a more ample supply of dye stuff that led
to the formation of the Dutch East India
Company and so to the overthrow of the
Portuguese supremacy in the East. Opposi-
tion to indigo in 17th century Europe was
keen owing to its interference with the wool
industry, but it was competition to obtain
indigo from other sources than India that led
to the first decline of the Indian indigo industry.
In the middle of the eighteenth century, when
the cultivation of indigo in the West Indies had
been given up—partly on account of the high
duties imposed upon it and partly because sugar
and coffee were found to be more profitable—the
industry was revived in India, and, as one
of the many surprises of the industry, the
province of Bengal was selected for this revival.
It had not sooner been organised, however, than
troubles next arose in Bengal itself through
misunderstandings between the planters, their
cultivators and the Government, which may
be said to have culminated in Lord Macaulay's
famous "Memorandum" of 1837. This led to
another migration of the industry from Lower
and Eastern Bengal to Tirhut and the United
Provinces. Here the troubles of the industry
did not end, for the researchers of the chemical
laboratories of Germany threatened the very
existence of any natural vegetable dye. They
first killed the madder dye of Europe, then the
safflower, the lac and the dyes of India, and
are now advancing rapidly with synthetic
indigo, intent on the complete annihilation
of the natural dye. Opinions differ on many
aspects of the present vicissitude, meantime
the exports from India have seriously declined,
and satisfaction admittedly lies in the path of
cheaper production both in cultivation and
manufacture. These issues are being vigor-
ously faced and some progress has been
accomplished, but the future of the industry
can scarcely help being described as a great
uncertainty. The issue is not the advantage of
other provinces chiefly by native cultivators.
crop is largely raised by British planters, in the
other provinces chiefly by native cultivators.
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or India in 1913-14" says that "it would seem
probable that unless great improvements can
be effected in cheapening the method of pro-

the highest percentage of indigotin, or by chemical improvement in manufacture, or in similar ways, the industry is unfortunately doomed "The average wholesale price of Indigo in Calcutta in recent years is as follows —

Rs 238 per cwt
1913
1914 (July) 184
1914 (Nov) 438
1916 (March) 652
The Director of Statistics in his first memorandum on the crop for the season 1915-16 states that the season has, on the whole, been favourable except in Bihar and Orissa and in the Punjab. The crop has been adversely affected by the recent floods in Bihar and Orissa, and in the Punjab by the deficiency of rainfall and the shortage of canal water. All the provinces except the Punjab show an increase in the area sown, the largest increase being in Madras and the United Provinces.

Tea cultivation in India is chiefly in Assam, Bengal and Southern India, the cultivation elsewhere being comparatively unimportant. The latest available official statistics are those for the year 1914. They show a total area of 622,600 acres under tea, which is nearly 2 per cent more than in 1913. Of this area, 566,500 acres were plucked in 1914. The total number of plantations was 4,405. The area under cultivation has increased in the last 10 years by 18 per cent and the production by 41 per cent. The average production per acre for the whole of India, excluding Burma (where the produce of the tea gardens is almost wholly converted into wet picked tea, which is eaten as a condiment) was 554 lbs in 1918 and 1914, as compared with 548 lbs in 1912.

The total area under tea in 1914 was divided between the different Provinces as follow —

Assam —
Brahmaputra Valley 231,900
Surma Valley (Cachar and Sylhet) 144,148
Total, Assam 376,048
Bihar and Orissa (Chota Nagpur) 159,034
United Provinces 7,994
Punjab 9,320
Madras 26,245
Travancore and Cochin 38,809
Burma 2,998
Grand Total 622,628
The total production in 1914 was 312,821,000 lbs, divided between the different parts of India as follows —

Assam	208,227,000
Bengal	75,473,000
Southern India	24,618,000
Northern India	4,321,000
Bihar and Orissa	282,000
Total	312,821,000

Tea.

Exports

The following were the exports in 1914-15 of Indian tea by sea —

United Kingdom 237,303,792
Russia 19,636,087
Other European Countries 91,70,29
Egypt 687,062
Elsewhere in Africa 723,453
Canada 10,950,615
U S A 2,737,534
West of America 228,611
Ceylon 3,292,620
China 8,308,802
Asiaic Turkey 1,229,826
Rest of Asia 3,762,923
Australasia 10,990,605
Total by Sea 300,771,081

The exports by land were as follows —

Afghanistan 682,864
Total by land 1,785,616
Grand Total of 302,556,697

The total quantity of Indian tea imported into the United Kingdom is not consumed there, a considerable portion being re-exported. The re-exports of Indian tea from the United Kingdom in the past five years have been as follows —

1910 18,587,000 lbs
1911 17,997,000
1912 19,368,000
1913 21,830,000
1914 30,389,000
The largest quantity of re-exports last year went to Holland. Next came Canada, then the United States and Russia. It was discovered that the ultimate destination of the tea sent to

Details for the provinces are given below —		Pro- vince		Area in acres (First forecast)		in cwt of yield estimate	
1915-16		1914-15		1915-16		1914-15	
Bihar and Orissa		60,800		38,900		7,300	
Madras		126,000		38,600		24,000	
Punjab		18,300		21,000		1,800	
United Provinces		46,500		12,300		4,000	
Bombay and Sind (including native States)		4,700		4,500		1,200	
Bengal		1,600		1,300		200	
Total		258,100		116,500		38,500	

...cultures of the Trade

— 111 —

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• The agencies for years previous to 1905 do not relate to the calendar year as it has been found impossible to procure complete data for the calendar year.

The following table shows the consumption of Indian tea in India —

Year	Lbs
1909-10	13,477,297
1910-11	14,224,608
1911-12	15,294,472
Year	1912-13
	1913-14
	1914-15
Lbs	19,805,560
	22,797,000
	10,291,000

The following statement illustrates the variations in prices of the three principal grades of tea sold at the auction sales in Calcutta in 1888 and the five years ending 1914, the average price of 1901 to 1910 being taken as 100 in each case. The figures represent the average of the prices per pound of tea from all districts at each sale —

Year	Broken Pekoe		Pekoe		Pekoe Souehong		Average for all description	
	Price	Varia- tion	Price	Varia- tion	Price	Varia- tion	Price	Varia- tion
1888	10 3	155	8 1	107	6 3	123	8 8	124
1910	7 3	110	7 0	119	6 4	125	7 10	112
1911 ..	7 9	117	7 7	129	6 9	133	7 11	113
1912	7 5	112	6 11	114	5 9	113	7 5	110
1913	8 1	122	7 5	126	6 10	135	8 2	117
1914	7 10	119	7 8	130	6 11	136	8 3	118

Capital and Labour

The number of persons employed in the industry in 1914 is returned at 587,868 permanently employed, and 88,602 temporarily employed. Compared with the returns of the previous year, there is an increase of 15,365 permanent employees and a decrease of 5,777 in the number of temporary hands. The capital of joint stock companies engaged in the production of tea amounted to about Rs 30 crores or over £20 1 millions, viz —

Companies registered in India 4,30,56,603 Rs

Companies registered in the United Kingdom (£17,284,848) 25,92,65,220

The Government of India's report on the production of tea in India in 1914, which contains the latest available official returns, states that of 98 companies registered in India, which have an aggregate paid-up capital of Rs 3,01 1/2 lakhs, 91 declared dividends for 1913, amounting to 17 7 per cent on the aggregate capital of Rs 2,82 lakhs, 86 companies have up to now declared dividends for 1914, amounting to 15 6 per cent on their aggregate capital of Rs 2,60 lakhs. The value per Rs 100 of joint stock capital as calculated on the price of the shares of 92 companies quoted in the Calcutta share market was Rs 166 in March 1914, and of 95 companies was Rs 181 in March 1915. Similar details are available regarding 68 companies registered in the United Kingdom with sterling capital of £10 1/4 millions (Rs 15,63 lakhs). The total dividends declared in 1914

The prospects of the tea industry continue bright. The demand for supplies for troops coupled with the prohibition of the manufacture of opium in France and of the sale of opium in Russia will no doubt result in a larger demand which may temporarily outstrip production. The exports by sea from British India in 1914 were 14 per cent higher than in the corresponding period (April to August) of 1914. The exports in the five months of 1915 were 11,53,000 lbs more than in the corresponding period of 1914, and 15,136,000 lbs more than the normal. Owing to the times being abnormal it is unsafe to estimate with accuracy the immediate future of the tea position.

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The history of the introduction of coffee into India is very obscure. Most writers agree that it was brought to Mysore some two centuries ago by a Shahnawaseen pilgrim named Baba Budan, who, on his return from Meccah brought seven seeds with him. This tradition is so universally believed in by the inhabitants of the greater part of South India, that there is every chance of its being founded on fact. About the beginning of the 13th century there is no doubt coffee had found its way to India, and in 1823 a charter was granted to Fort Gloster, near Calcutta, authorising it to become a cotton mill, a coffee plantation and a rum distillery. Some of the coffee trees to be still alive, and about the same time coffee was successfully grown in the Botanic Gardens, Calcutta, but the industry of coffee planting nowhere found an abiding place on the plains of India but migrated to the hills of South India, in Mysore more especially, and thus into the very region where tradition affirms it had been introduced two centuries previously. The first systematic plantation was apparently Mr Cannon's near Chikmagalur. This was established in 1830. It is supposed, however, that Major Beyer may have actually grown coffee on the Wynad at a slightly earlier date and that Mr Cockburn's Shevaroy plantation bears the same date as Mr Cannon's. In 1840 Mr Clouston formed a plantation at Mananaddi, and in 1846 plantations were organised on the Nilgiri hills. The position of the industry—the report—given under coffee has shown a continuous diminution since 1896. According to the

01-63 04 1-2 63
01-63 04 1-2 63

no marked change in the position since 1902 —

Cuts.

1902-03	229,165
1903 04	291,251
1904-05	29,617
1905 06	960,182
1906-07	228,094
1907-08	244,231
1908 09	302,032
1909-10	212,615
1910-11	272,249
1911-12	211,052
1912-13	267,000
1913 14	260,000
1914-15	270,000

The exports to the United Kingdom have in the last few years fallen off considerably, there has been a great diminution in the trade with France, but exports to other Continental countries have shown some increase. No estimate of the quantity of coffee consumed in India can be given during the 10 year period 1911; 14 the price of Indian coffee has risen from 23 7-1 to 23-12-10, per cent, and of 12 1-1-10

OIL CAKES

The Forests of India.

Area of State Forests

The forests belonging to the State covered in 1913-14, 246,612 square miles, or roughly one-fourth of the whole of India and Burma. Of this 96,297 square miles are Reserved Forests, 8,390 square miles Protected Forests and 140,925 square miles Unclassed forests, by far the greater portion of the latter class occurring in Burma. The distribution of these areas is by no means uniform, the majority being found in Burma, Assam, Northern Bengal and along the foot of and extending into the Himalayas from the Nepal frontier westward through the United Provinces and the Punjab. In the Gangetic valley, vines and the Punjab, in Sind and Rajputana few forests occur except along the rivers, nor does one come across large wooded tracts until one enters the Central Provinces and the Godavari catchment area. From there southward in the Satpurna and throughout the North and South Deccan there exist well distributed areas of forests, though generally not in large blocks, while on the Western Ghats, in the Nilgiris and Annamals, are found some of the finest teak forests of India proper. The East Coast of India is fairly well stocked with forest growth, especially in the Godavari basin, to the west of Cuttack and Puri and again in the Sunderbans, while the Andaman Isles are densely wooded.

Revenue, Expenditure and Outturn

The gross Revenue from State forests in 1913-14 amounted to Rs. 3,33,01,545, while the expenditure stood at 1,75,43,455, giving a net revenue of Rs. 1,57,58,090. The total out-turn of timber and fuel in that year amounted to 294 million cubic feet, out of which 18,89,4872 cubic feet of fuel and 4,29,89,818 cubic feet of timber were given free to the local population. The number of bamboos removed came to nearly 302 million, valued at 18 lakhs of rupees and the number of cattle grazed amounted to 15,67,45,98, while the total revenue derived from Minor Products was 107 lakhs of rupees. From the above figures it will be readily understood that not only is the revenue realised by the State considerable but that the handling of such large amounts of Forest Produce requires a competent staff of officers.

Management

The system under which the State forests are managed varies in different Provinces. In all cases, however, the aim of the Forest Department has been to introduce Working Plans for their forests, based on European systems of management. The system most usually adopted in India, especially for work of the valuable teak and sal forests, is the Selection System, in other words maintaining an equal distribution of all age classes throughout the forest. In a few cases such as in deodar and other coniferous forests and also in a few instances in sal forests, the Uniform Method or a system by which trees of more or less uniform age are grouped together has been applied, and this method of mere intense

The necessity of protecting the vast forest areas in India and Burma was first recognised in the Madras Presidency nearly a century ago, when steps were taken to protect on a limited scale the more valuable areas in the Annamals, while in December 1886 Doctor Clegghorn was appointed the first Conservator of Forests in that Presidency. It was not, however, until 1886 that Lord Dalhousie laid down a definite policy with the object of affording more widespread protection to the vast areas of valuable forest in British India. The action taken by the Supreme Government came none too soon, for already in many localities the wanton hacking by the local population and even more so by timber contractors, had reduced the forests to a state from which they could not be expected to recover for many years, even under the strictest protection.

Recruitment of the Staff

In order to introduce a system of conservative management on scientific lines it was of first importance to collect a staff of trained foresters, and as no forest training college existed at that period in England, the Government of India, as a commencement, enlisted the services of three German Forest Officers. The first of these to come to India was the late Sir Detrich Braud, R O E, F R S and it was to his extraordinary energy and abilities that a sound foundation was originally laid to the scientific management of the State forests. Soon after his arrival in India, the staff was materially strengthened by the recruitment of officers from the Indian Army. In 1869 the first batch of technically-trained English forest officers joined the service, having received their training either in Germany or France, and this system of continuing training remained in force until 1876, after which the training was carried on entirely at the National Forest school of Nancy. The first batch of Cooper's Hill trained foresters arrived in India in 1887 and the last in 1907, after which date the training took place at Oxford University, and later also at the Universities of Cambridge, Edinburgh and Dublin. In this way the Government of India have been able to collect by degrees a highly trained staff of men to carry on the administration of their State forests. The total strength of the Imperial Establishment at the present time is 247, of whom 29 are administrative officers and 219 Executive officers, among the latter are included Instructors and Research Officers who are employed at the Forest Research Institute, Dehra Dun in order to keep pace with the recruitment of the Forest staff, a Forest School was opened in 1878 at Dehra Dun for the training of Forest Rangers. Recently this School has been converted into a College and the institution extended to include a course for training men for the Provincial Services. Besides the Forest College at Dehra two new Rangers' Schools have been established, one at Pylimanna in Burma and the other at Colombo in Ceylon. Besides this nearly every Province has established a local Forest School for the training of the lower subordinate establishment.

Commercial Development—In recent years there has been a noticeable increase in the demand for forest products and several industries dependent on their supply have been or are about to be started. One of the most important of these is the utilisation of bamboo, sarranah grasses and firewood for the manufacture of paper-pulp, and to assist the development of this industry, a special expert has been employed. With the assistance of the Tifaghur Paper Mills Company, Limited, trials in the manufacture of bamboo pulp have been carried out successfully on a commercial scale, and concessions for the extraction of bamboo have been granted to two firms in Burma and Bengal. In the Punjab a concession for the extraction of spruce and silver fir from the Kulu forest for the manufacture of wood pulp has been granted. Matters are less advanced as regards the grass pulp industry. The extraction of tanning materials has received attention for some time past, particularly in the matter of obtaining a satisfactory extract from the bark of mangrove. The services of a Tanning Expert have been obtained. During recent years much has been done to stimulate the local manufacture of matches, tests with numerous Indian woods have been carried out and a report regarding their suitability and the prospects of this industry has been issued. Several match factories on countries.

The statement below relating to **Exports of Forest Products** is taken from the "Annual Return of Statistics relating to Forest Administration in British India" for 1911-14, recently issued—

Articles or Forest Produce		Quantity in Tons or cwt in the case of teak and other timbers, cubic feet		Average of 5 years 1908-09 to 1912-13		Total in 1911-12		Total in 1913-14	
Value at Port or shipment in 1913-14	Per Ton	In 1911-14		In 1911-14		In 1911-14		In 1911-14	
		Rs		Rs		Rs		Rs	
Cautehouse, raw	1,196	1,103		1,103		1,103		1,103	
		1,093		1,093		1,093		1,093	
Buteon	1,196	1,093		1,093		1,093		1,093	
		1,093		1,093		1,093		1,093	
Shell	1,196	1,093		1,093		1,093		1,093	
		1,093		1,093		1,093		1,093	
Lac	1,196	1,093		1,093		1,093		1,093	
		1,093		1,093		1,093		1,093	
Cutch and Gambier	1,196	1,093		1,093		1,093		1,093	
		1,093		1,093		1,093		1,093	
Stick, seed and other kind	1,196	1,093		1,093		1,093		1,093	
		1,093		1,093		1,093		1,093	
Cardamums	1,196	1,093		1,093		1,093		1,093	
		1,093		1,093		1,093		1,093	
Sandal, Ebony and other ornamental	1,196	1,093		1,093		1,093		1,093	
		1,093		1,093		1,093		1,093	
Woods	1,196	1,093		1,093		1,093		1,093	
		1,093		1,093		1,093		1,093	
Teak	1,196	1,093		1,093		1,093		1,093	
		1,093		1,093		1,093		1,093	
Other timbers	1,196	1,093		1,093		1,093		1,093	
		1,093		1,093		1,093		1,093	

(a) Quantity (whether by weight or measurement) not recorded
(b) Corrected figure includes "other timbers" previously excluded.

Province

Area of Province
Reserved Lands
Total

Proportion of Total
Produced

Proportion of Total
Produced

Area of Province
Reserved Lands
Total

Proportion of Total
Produced

Proportion of Total
Produced

British Columbia
Alberta
Saskatchewan
Manitoba
Ontario
Quebec
New Brunswick
Nova Scotia
Prince Edward Island
Newfoundland

Area of Province
Reserved Lands
Total

Proportion of Total
Produced

Proportion of Total
Produced

Proportion of Total
Produced

Proportion of Total
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Proportion of Total
Produced

Proportion of Total
Produced

Proportion of Total
Produced

Proportion of Total
Produced

British Columbia
Alberta
Saskatchewan
Manitoba
Ontario
Quebec
New Brunswick
Nova Scotia
Prince Edward Island
Newfoundland

Area of Province
Reserved Lands
Total

Proportion of Total
Produced

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British Columbia
Alberta
Saskatchewan
Manitoba
Ontario
Quebec
New Brunswick
Nova Scotia
Prince Edward Island
Newfoundland

Area of Province
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Total

Proportion of Total
Produced

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Proportion of Total
Produced

Forests

RUBBER CULTIVATION.

The most important rubber-yielding tree found growing naturally in the forests of India is *Ficus religiosa*, a very large tree of the outer Himalayas from Nepal eastwards, in Assam, the Khasia Hills and Upper Burma. It has also been cultivated in Assam in the Charduar plantation in the Tezpur Sub-Division as also in the Khasi plantation of the Garo Sub-Division. There are also a number of other rubber-yielding trees found in the Indian and Burman forests from which rubber can be collected on terms quoted by Government. Attempts have been made to cultivate Para, Ceara and Castilla in various parts of India and Burma. In India proper the chief attempts were made on the west coast, about 180 acres being planted from 1908 onward at Geopora. Similar attempts have been made in Madras but at present Para rubber is being grown as a commercial product rather in Burma than the rest of India.

The production of rubber in India is confined to Assam, Burma, and the Madras Presidency —

Assam	Madras	Burma	Total
4,681	137,430	28,644	46,247
4,681	1,096,476	4,911,399	6,685,305
No of trees	Acres		

The yield of Assam plantations is relatively small, and the number of trees to the acre is much less than in Madras and Burma. The

The total imports of matches into British India in 1914-15 amounted to nearly 15½ millions gross boxes, valued at Rs 113 lakhs. The share of Japan in the import trade was 61 per cent and that of Sweden 24 per cent. It is true that there was a steady drop in the imports of matches from Japan during the first four months of the war, but this was followed by a very rapid rise in December 1914 onwards. In normal years matches are also imported from Austria, Hungary, Germany and Belgium. In the opinion of the Forest experts at Dehra Dun there is an abundance of raw material in this country for match manufacture.

Indian timbers for matches — In an article in the *Indian match industry* which appeared in the *Indian Agriculturist* the woods of the following species are said to be employed in Burma for match splines: *Bombax insignis*, *B. madagascariensis* (simul), *Anthocarpus*, *Adiantum* (kadam), *Sarcocophalus cordatus*, *Spondias munda*, *Engelhardtia*, *Spicaria* (gaharu), and *Pinus*. These woods are not the best for the purpose, but are those most easily procurable. There are other kinds of white wood, such as poplar, pine, willow, and alder, in abundant

MATCH FACTORIES.

quantities, but they are difficult to extract and transport and are therefore costly. The attempts to manufacture matches in India have not hitherto been attended with great success, but recently two well-equipped factories have been started in Burma which give promise of good results. One of these is at Mandalay, and is owned by Chinese, the other is at Mandalay, and is under European management. Further investigations are said to be necessary in order to settle the question as to the most suitable woods to employ, and when these have been brought to a satisfactory conclusion it is thought that Burma will be able to produce matches of first-class quality. It may be added that in 1912, the latest year for which complete statistics are available, there were six match factories in India.

The Law in India prohibiting the importation of the old sulphur matches as from July 1st, 1913, has not seriously affected the position of the Swedish manufacturers, as they were able to supply another "strike-anywhere" match to take the place of the kind then prohibited, but as the new kind is dearer to manufacture the prices have gone up, and are likely to rise still further.

The Commissioner of Settlements and Land Records, Burma, gives the following rough estimates of future production —

1915	1916	1917
1,500,000 lbs.	1,800,000 "	3,000,000 "

Burmese Rubber — For fuller details see "Director of the Economic Products of India" and the abridged edition of the same published in 1908 under the title "The Commercial Products of India," by Sir George Watt, and the "Commercial Guide to the Forest Economy of India," by R. S. Pearson, published by the Government Press, Calcutta, 1912.

There has been a steady development in the exports of rubber from India. The exports increased from 23,264 cwts, valued at Rs 79 lakhs, in 1913-14 to the record figure of 32,823 cwts, valued at Rs 93½ lakhs, in the year 1914-15. India, including Burma and the Mergul, has increased its plantations from 46,000 acres in 1913—the year for which statistics are given above—to 65,000 acres in 1914.

The Commissioner of Settlements and Land Records, Burma, gives the following rough estimates of future production —

Mines and Minerals.

The feature which stands out most prominently in a survey of the mineral industries of India is the fact that until recent years little has been done to develop those minerals which are essential to modern metallurgical and chemical industries, while most striking progress has been made in opening out deposits from which products are obtainable for export, or for consumption in the country by what may be called direct processes. In this respect India of to-day stands in contrast to the India of a century ago. The European chemist armed with cheap supplies of sulphuric acid and alkali, and aided by low sea freights and increased facilities for internal distribution by the spreading network of railways has been enabled to stamp out, in all but remote localities, the once flourishing native manufactures of alum, the various alkaline compounds, blue vitriol, coppers, copper, lead, steel and iron, and seriously to curtail the export trade in nitre and borax. The reaction against that invasion is of recent date. The high quality of the native-made iron, the early impulsion of the processes now employed in Europe for the manufacture of high-class steels, and the artistic products in copper and brass gave the country a prominent position in the ancient metallurgical world, while as a chief source of nitre India held a position of peculiar political importance until, less than forty years ago, the chemical manufacturer of Europe found among his by-products, cheaper and more effective compounds for the manufacture of explosives.

With the spread of railways, the development of manufactures connected with jute, cotton and paper, and the gradually extended use of

the Bengal—Gondwana coal-fields Outside Bengal the most important mines are those at Singareni in Hyderabad, but there are a number of smaller mines which have been worked at one time or another.

There was a small rise of 1½ per cent in quantity and about 3 per cent in value of the Indian output of coal in 1914 which has now reached nearly 16½ million tons with a value of Rs. 97,380. The pits' mouth value varied from Rs. 3 in Central India to Rs. 9 in Baluchistan, the figures for the chief coalfields, however, being Rs. 3-3-4 for the fields of Bihar and Orissa and Rs. 3-13-10 for those of Bengal. There has been a very marked rise in recent years in the case of Assam coal, which has risen from under Rs. 5 in 1912 to Rs. 7 in 1914. The pits' mouth value has risen both in the Jheria and Raniganj fields, but has fallen in Central India and in the Mizam's Territory, and has remained steady in the Purnab

Year	Output Tons	Declared value per ton	Exports Tons	Imports Tons
1904-05	8,216,706	Rs. 2	694,832	252,393
1905-06	8,417,739	7 13	836,149	179,986
1906-07	9,783,250	7 15 11	935,350	257,203
1907-08	11,147,389	8 1 7	727,881	308,348
1908-09	12,769,685	8 13 5	571,582	455,806
1909-10	11,870,064	8 13 7	758,825	428,595
1910-11	12,047,413	8 10 6	889,601	384,181
1911-12	12,715,534	8 13 0	873,987	297,912
1912-13	14,706,339	10 0 4	881,239	653,694
1913-14	16,208,009	9 8 11	723,641	659,190
1914-15	16,464,000	8 14 2	694,000	392,000

Coal.

Year	Coal	Gold	Petroleum	Manganese-ore	Salt	Mica	Salt-petre	Lead-ore and Lead	Tungsten-ore
1914	3,907,380	2,201,917	1,034,380	1,211,034	877,264	483,289	302,564	272,462	178,543
1913	3,938,355	2,201,917	1,034,380	1,211,034	877,264	483,289	302,564	272,462	178,543
1914	3,907,380	2,201,917	1,034,380	1,211,034	877,264	483,289	302,564	272,462	178,543

as follows —
Value of Output—The total value of the chief minerals for which returns of production are available for the years 1913 and 1914 was

MANGANESE ORE.

This industry commenced some twenty years ago by quarrying the deposits of the Vizagapatnam district, and from an output of 674 tons in 1892, the production rose rapidly to 92,008 tons in 1900 when the richer deposits in the Central Provinces were also attracted, and are now yielding a larger quantity of ore than the Vizagapatnam mines. India now ranks with Russia as the first manganese-producing country in the world. The most important deposits occur in the Central Provinces, Madras, Central India, and Mysore—the largest supply coming from the Central Provinces. The uses to which the ore is put are somewhat varied. The peroxide is used by glass manufacturers to destroy the green colour in glass making, and it is also used in porcelain painting and glazing for the brown colour which it yields. The ore is now used in the manufacture of ferromanganese for use in steel manufacture. Since 1904, when the exports of manganese ore from India during the years 1913-14 and 1914-15 are shown in the following table —

To	1913-14		1914-15	
	Tons	Rs	Tons	Rs
United Kingdom	258,776	42,771,102	227,281	39,727,171
Belgium	187,821	31,846,620	66,043	10,85,932
France	103,847	19,147,722	46,326	8,43,460
United States	106,927	16,101,805	73,503	11,02,545
Other Countries	61,278	12,13,800	27,437	6,26,175
Total	718,049	1,21,31,419	40,590	75,30,283

The fall in prices in the latter part of 1907 produced by 1909 an almost complete cessation of mining for lower grades of ore at mines far removed from railways. Owing to an excess of production over exports the stocks on the mines at the end of 1908 stood at the high total of nearly 300,000 tons. The rise in the price of ore during 1910 resulted in a considerable increase in the total production, namely from 642,675 tons in 1909 to 800,907 tons in 1910. At the same time there was a slight fall in the value of the output. In 1912 there was a rise of over 36 per cent in the value of the output. The amount produced in 1910 was therefore due to improved prices and not to increased output.

GOLD.

The greater part of the total output of gold in India is derived from the Kolar gold field in Mysore. During the last decade the production of this mine reached its highest point in 1905 when 616,758 ounces were raised. In 1906 the quantity won was 555,208 ounces and this figure fell to 535,055 ounces in 1907. The figures for the latter years reveal a small improvement. The Nizam's mine at Hutti in Hyderabad comes next, but at a respectable distance, to the Kolar gold field. This mine was opened in 1903. The only other mines from which gold was raised were those in the Dharwar district of Bombay and the Anantapur district of Madras. The Dharwar mines gave an output of 2,993 ounces in 1911 but work there ceased in 1912. The Anantapur mines gave their first output of gold during the year 1910, the amount being 2,532 ounces, valued at Rs. 1,51,800. Gold mining was carried on in the North Arcot district of Madras from 1893 till 1900, the highest yield (2,854 ounces) being obtained in the year 1898. The Kyanprazat mine in Upper Burma was worked until 1903, when the pay chute was lost and the mine closed down. In 1902 dredging operations were started on the Irrawaddy river near Myitkyna, and elsewhere in India amounted to 607,383 oz valued at £2,338,355.

The average earnings of the workers are very small, and the gold thus won is used locally for making jewellery. The latest statistics available for the whole of India are for 1914 when the gold produced in Mysore and elsewhere in India amounted to 607,383 oz valued at £2,338,355.

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Inspection of Mines

During the year 1911 the average number of persons working in and about the mines registered by the Indian Mines Act was 185,211, or 120,051 worked underground and 65,160 on the surface. One hundred and fifteen thousand one hundred and seventy-four were adult males 4170 were adult females and 5,858 were children under 12 years of age. This is an increase of 5,951 workers or 2.18 per cent. Accumulated—During the year 1911, at mines registered by the Indian Mines Act, 1901, there were 152,171 registered, being an increase of 16, compared with the number in 1913, and an increase of 22 compared with the average number of 146,547.

These accidents involved the loss of 191 lives. This is a decrease of 20 upon the number of deaths in 1911.

There was no single accident involving a large death toll, as was unfortunately the case in 1913. In one case, however, 6 lives were lost owing to a fall of roof in a coal mine, and in two cases 5 lives were lost, one by an explosion of gunpowder in a salt mine, and the other by an interruption of water in a mica mine. In five cases killed 2 persons, and in fifteen cases 2 persons were killed.

Of these 152 accidents the Chief Inspector of Mines regards (a) 77 as being due to mismanagement, (b) 42 to the fault of the deceased, (c) 5 to the fault of the management.

Very many of these accidents might have been prevented by the exercise of ordinary care and forethought on the part of both officials and men, and the Chief Inspector of Mines is satisfied that only by closer supervision and stricter discipline can their number be diminished. Such accidents result from persons passing through fences into old workings to get easily worked coal, from persons sitting in dangerous places or under roof coal at which they have just been working, from persons being struck down by falling roof and sides as they travel and from their working places, and from disobedience to an official's orders in trivial matters.

The death-rate per thousand persons employed was 1.04, while that of the preceding five years was 1.17. At coal mines only 17. At coal mines only 1.04 and 1.34, and at mines other than coal 0.97 and 0.69. At coal mines in England during the ten years ending with and including 1913, the death-rate per thousand persons employed varied from 1.17 (lowest) to 1.69 (highest). The death-rate per million of tons raised at coal mines only was 9.22 while that of the preceding five years was 11.04. At coal mines in England during the ten years ending with and including 1913, the death-rate per million tons raised varied from 4.29 (lowest) to 6.37 (highest).

Chief Inspector of Mines in India, G. E. Adams, M. Inst., C. E.

Bibliography—Report of the Chief Inspector of Mines in India, under the Indian Mines Act (VIII of 1901) for 1911 by G. E. Adams, (Chief Inspector of Mines)

Gem Stones—The only precious and semi-precious stones at present mined in India are the diamond, ruby, sapphire, spinel, tourmaline, garnet, topaz, cat's paw, agate, cornelian, jasper, and amber. Amber has already been referred to, of the rest only the ruby, sapphire and jadeite are of considerable value in production and the export of the latter has declined owing to the disturbances in China, which is the chief purchaser of Burmese jadeite. The output of diamonds is comparatively unimportant. The ruby-mining industry of Burma has lately undergone a favourable change. In 1914 the output of gems was 30,442 carats.

Tungsten—A marked feature of the development of the mineral industry of India during recent years is the rapid rise of the tungsten industry in the district of Mysore and Travancore. Although this is an output in Lower Burma. The output of tungsten in 1910 was practically from the following year 1910. The output of tungsten in Burma rose from 1,688 tons valued at £127,762 in 1913 to 2,326 tons valued at £178,541 in 1914. Had it not been for this output would probably have been considerably recovered itself, and owing to the demand for tungsten for the manufacture of tungsten-steel, special regulations have been made for the mining or it under the Denence or India Act.

According to the Director of the Geological Survey, the total production of the world is about 8,000 tons per annum of concentrates carrying from 60 to 70 per cent of tungstic trioxide. Of this Burma produces one quarter. In Sumatra the mining of wolfram is a recent development. Wolfram is also produced in Australia and in the Malay Peninsula. Formerly Germany used to take over 50 per cent of the total exports from India, but this is one of the minerals of which the export was restricted owing to the war. This shipments for Germany were diverted in 1914-15 to the United Kingdom, which took 1,118 tons or 58 per cent of total exports of 1,910 tons, valued at Rs. 20½ lakhs.

Radio-active Minerals—The General Report of the Director of the Geological Survey of India for 1913 includes a brief report by R. C. Burton on an occurrence of pitchblende at mica mines near Singar, Gaya district, Bengal. The pitchblende occurs as rounded nodules in a pegmatite that is intrusive in the mica schists. Other minerals occurring in the pegmatite are mica, trillite, ilmenite, tourmaline, and uraninite. It is associated so persistently with the pitchblende and uranium that its presence is taken as an indication of the presence of these minerals. Many of the pitchblende nodules occur in a matrix of granite, some occur in a felspathic matrix. One nodule of pitchblende weighing 36 lb has been obtained. The pegmatite has been mined for many years for mica. As yet, not much pitchblende has been obtained, but one pit has yielded up to the present about 1 cwt of the mineral.

614

them, have come down in an unbroken tradition from the Kamayana and Alahabharata. The old types survive side by side with the copies of articles imported from the time of the British rule. Scattered here and there all over the country are handloom factories where coarse blankets, carpets, and other fabrics are produced. This indigenous wool industry is most important in the Punjab. The great centre of shawl production is Kashmir, the industry has also been carried on for many years in parts of the Punjab, where it was introduced by colonies of Kashmir weavers. France was for many years the chief foreign market for Kashmir shawls, and the trade, which was damaged also by the competition of cheap imitations produced at Paisley, never recovered from the effects of the Franco-German War. The bulk of the Kashmir shawl-weavers became carpet-weavers or agriculturists. The latest report from the Punjab regards the case of the genuine shawl industry as "almost hopeless". Carpet-weaving is carried on in various parts of the country. It is one of the many industries which is said to have been ruined by modern civilisation, and in so far as many carpet factories in India are turning out an inferior article, according to designs furnished by dealers in Europe, this is correct. But it is wrong to ascribe the cheapening of the caste weaver's product and his increased output to underweaving by those jails in which the weaving of carpets has been introduced as an occupation for prisoners. On the other hand the jails, and especially that at Yerrowda, near Poona, have set a high standard by conserving old designs, by using good material, and by avoiding the use of machine dyes. Since the London Exhibition of 1881 a considerable export trade in Indian pile carpets has been created. American pile carpets for the American market, in particular, is the most important carpet-weaving centre in India, but there are factories in many other places in Northern India, Rajputana, Central India and the United Provinces. Cotton and woolen carpets in other than pile stitch are made all over India. They are known as *dari* (a rug) and *shatranji* (a carpet) and are made in great variety. The poorer classes of diamonded carpets generally use the cotton manufactures as praying carpets.

Shawl and Carpet Weaving

It is only in Northern India (more especially in Kashmir) that the spinning and weaving of wool extends to the production of highly-finished and artistic goods. Scattered here and there all over the country are handloom factories where coarse blankets, carpets, and other fabrics are produced. This indigenous wool industry is most important in the Punjab. The great centre of shawl production is Kashmir, the industry has also been carried on for many years in parts of the Punjab, where it was introduced by colonies of Kashmir weavers. France was for many years the chief foreign market for Kashmir shawls, and the trade, which was damaged also by the competition of cheap imitations produced at Paisley, never recovered from the effects of the Franco-German War. The bulk of the Kashmir shawl-weavers became carpet-weavers or agriculturists. The latest report from the Punjab regards the case of the genuine shawl industry as "almost hopeless". Carpet-weaving is carried on in various parts of the country. It is one of the many industries which is said to have been ruined by modern civilisation, and in so far as many carpet factories in India are turning out an inferior article, according to designs furnished by dealers in Europe, this is correct. But it is wrong to ascribe the cheapening of the caste weaver's product and his increased output to underweaving by those jails in which the weaving of carpets has been introduced as an occupation for prisoners. On the other hand the jails, and especially that at Yerrowda, near Poona, have set a high standard by conserving old designs, by using good material, and by avoiding the use of machine dyes. Since the London Exhibition of 1881 a considerable export trade in Indian pile carpets has been created. American pile carpets for the American market, in particular, is the most important carpet-weaving centre in India, but there are factories in many other places in Northern India, Rajputana, Central India and the United Provinces. Cotton and woolen carpets in other than pile stitch are made all over India. They are known as *dari* (a rug) and *shatranji* (a carpet) and are made in great variety. The poorer classes of diamonded carpets generally use the cotton manufactures as praying carpets.

Apart from woven mats or carpets there is manufactured a great variety of so-called mats made from grass and other materials such as aloë, bamboo, cot, date and other palm leaves. Mats of rather screens (lattices) made of the sweetly scented *Khas khas* are hung in front of doors, etc., to afford shade and to cool, by evaporation, the air which passes through the moistened texture. Bamboo mats are manufactured here and there all over India, and in Bengal more especially *durma* mats (those constructed of reeds) are all but

style of punched brass, which is as a rule bad in design and execution, and the engraved or repoussé work in polished brass that comes in large quantities from Jaipur. Better than either of these are the perforated and repoussé copper work of Lucknow, the best products of Bombay, Poona, and the gongs and idols made in Burma. Ordinary domestic utensils, which are free from ornamentation so that they can be readily secured, and the more elaborate implements used for religious ceremonies are among the most and beautiful interesting metal wares in India, but they vary in style and finish throughout the country. Sir George Vath writes —

"The copper or brass vessel of most general use by the Hindus is the *loti*, a globular melon-shaped vessel flattened from the top and having an elegantly flattered rim by which it is carried suspended between the fingers and thumb in shape this doubtless originated from the partially expanded flowers of the sacred lotus, its name thus coming from the same root as the Latin *lotus*, "washed," and the English "wash," and the *Alahomedans* the *loti* (or *konti*) has been given a spout because the Quran ordains that a man shall perform his ablutions in running water, hence the water when poured out of the *loti* is considered to be running water. It is carried by holding the rim at one side and it thus angles instead of being (as with the Hindus) suspended from the middle of the hand. The shapes of the *loti* and *konti* and their respective uses have given birth to two widely different forms of both domestic and decorative metal work characteristic of India. For example, the spout and the use of copper, more especially when fluted, has originated a whole range of forms and designs not only quite unknown to the Hindus but next to impossible with the materials permitted by their religion. It is possible any longer to divide the gold and silver plate work of India into four or five well defined classes distinguished by the style of ornamentation, as the workers in these metals have been quick to adopt a variety of European models in Indianas mythological medallions, in imitation of the engraved style of Southern India art, still form the characteristic feature of much of the silver work in Bombay and two distinctive forms survive, the *Doona* and *Kutchi* of these the former is a deep form of repoussé, the silver usually being beaten origin in shallow repoussé. Kangoon work is generally known by the frosted surface of the silver and *Alahomedan* work by the silver being either polished or burnished. But in almost every case the design of one province is copied in another, and the best forms of ornamentation, such as the shawl pattern of Kashmir, have fallen into disuse either because of the labour involved in their production or because the smiths have found by experience that it is just as easy to sell inferior work as great varieties of form and style are to be seen in the arms and jewellery made in India. Sir George Birdwood in his "Industrial Arts of India" says that "the forms of Indian jewellery as well as of gold and silver plate, and the chasings and embossments decorating

[illegible]

The carrying of horns and shells was possibly counted as variations of this art.

Part of that division of handicrafts which is vaguely connected under the term "fine arts" is the subject of an article elsewhere in this book. Apart from painting, it is not a very considerable division, except the wide-spread production of miscellaneous subjects, is little practised. Various brass workers are expert in reproducing in miniature scenes of Indian life and animals of the country, and at such work some excellent terra cotta statuettes are produced. Wherever wood-carving is practised, and particularly in Burma, statuary in that material is much cut and is used chiefly for decorative purposes.

Statutory

Embroidery

places, and the fish conducted pearl operations on their own account. Under artificial rule, the rights have been let for a small sum, but the pearls are very inferior in size and quality, so that the industry has greatly declined during the last thirty years. At present practically no pearl fishing is carried on. Considerable fisheries also exist in the river Indus, chiefly for the fish known as palli, which are annually leased out by Government for about Rs. 20,000.

But for a province with such a length of sea-board and with the estuary of the Indus within its borders the fishing population is singularly small. The fishing boats and appliances generally are very small and the fishermen do not go out in rough weather. The best fishing season is the cold weather months of December, January and February, and it is probable that with such a very brief season the harvest of the sea is not sufficient to support a larger population. The fishing castes frequently desert their caste occupation for others, according to the 1911 census report. When the two groups, fishermen and fish dealers, are amalgamated, there is a decrease of 8,000 in the aggregate, which can only be explained by their deserting their ancestral occupation.

The Government of Baroda, a State lying within the borders of the Bombay Presidency being desirous of introducing oyster culture into the coast districts of their State, have delegated a student to Pulicat, where the Madras Fisheries Department are engaged in similar work, and he is receiving practical instruction.

Madras

The Madras Irrigation tanks usually contain coarse fish, the right of netting which is disposed of annually. The sea-fisheries along the coast employ thousands of persons, and the salting of the catches is a very considerable industry. The development of the fisheries of the Presidency is now under investigation by Government.

carried on in special yards under Government supervision, and is an important industry. The report of the Madras Fisheries Department for 1913-14 stated that the principal operations under organisation were the West Coast station at Tanur for experimental curing, earning the production of fish oil and guano, the oyster farm at Pulicat, the Sumbakshi fish farm, and the stocking of certain tanks, the preparation of important piscicultural projects, including the Tuticorin marine fish farm, the Nellore carp and mullet farm, the Colar Lake tilapia hatchery, and mullet farm, the accumulation of such work in anti-malarial operations such as the breeding and distribution of tilapia fish, the conservation of the upper waters of the Nalligiri, the conservation and development of the trout in the Upper Nalligiri, and work by the newly appointed Oil Chemist.

At Tanur the percentage of first class yellow oil now obtained averages above 50 per cent of the output. This oil was recently described by a European buyer as "unique" by reason of its purity, colour and slight odour.

An inspection of the Palli Bay waters (between India and Ceylon) near Pondicherry resulted in the discovery of a fairly mature bed of oysters, estimated at twenty millions in number. The fact is remarkable because no pearl fishery or pearl oyster bed has ever been known before in the Palk Bay, which is north of the Pamban channel, all fisheries having hitherto taken place to the south in the Gulf of Mannar, where alone pearl oyster beds have been worked from time immemorial. There was drawn up during the year a scheme for cultivating the pearl oyster under controllable conditions in a regular farm, and for husbanding the growth of pearls, both attached and free, in these controlled oysters. From Japanese facts it is almost certain that the farm will be very lucrative, even if only "attached" pearls are grown, but inducing the growth of the more valuable "free" pearls, and have already forwarded a paper to the Linnean Society with specimens of the results in this direction.

Progress was continued during 1913 with out the development of any important branch of work. The Madras Government issued a Resolution on the retirement of Sir P. Nicholson, the honorary Director of the Fisheries Department, expressing their appreciation of his devoted service and his ability in making his work a success.

Bombay Hydro-Electric Scheme.

The Tata Hydro-Electric Power Supply Company, Limited, was founded in November, 1910, with the friendly encouragement of the Bombay Government, to exploit the possibilities of the Western Ghats, 60 miles distant from Bombay, with their heavy and unutilised supply of electric energy for the City of Bombay in order to provide a big receiving reservoir, above the Kevrning Station on the C. P. Railway. The Company's Power House is at Kharoli at the foot of the Ghats where the stored water is conveyed through pipes lined in the dam of the Forebay, the fall being one of 1,725 feet. In falling from this height the water develops a pressure of 750 lbs per square inch and with this force drives the Turbines or waterwheels (originally the Company started with a subscribed capital of Rs 1,20,00,000) and the Scheme was restricted to 30,000 Electrical Horse Power but the Company in 1912 in view of the increased demand of power from the Bombay Mills decided to extend the Works by the building of the Shurasta Dam and issued further shares which were allotted at varying premiums, the total obtained being placed to reserve, the capacity of the Scheme being increased to more than 40,000 Electrical Horse Power.

Interest at the rate of 4 per cent per annum is being paid, with the consent of Government, to shareholders of both Ordinarv and Preference shares during the construction of the company's works, as a charge against capital. (This payment may not be made beyond the close of the half-year next after the half-year during which the works of the company are actually completed.)

The works were formally opened by H. E. the Governor of Bombay on the 8th February, 1915, and on the following day a start with the supply into Bombay City was made with two mills, taking about 1,400 B. H. P. between them. The following is the state of progress as shown by the latest official reports of the Company. The great construction works above and below ghats have nearly reached completion. Twenty mills are completely equipped and receiving power. Eight mills are receiving power for partial requirements. Load is being added continuously with due regard to the convenience of the consumers. Arrangements are now being made for night supply of energy. At present the 28 mills with motors of the aggregate B. H. P. of 32,700 in service. In addition to the cotton and flour mills who have contracted to take supply from the company for a period of ten years, the company have entered into a contract with the Bombay Electric Supply and Tramways Company, Limited, for energy required by them for two of their sub-stations and the necessary plant for one of these has been ordered. There remain many prospective buyers of electrical energy and the completion of the company's full scheme, calculating the Shurasta Lake, even up to its full height of 2,162 F. S. I. will barely suffice to meet all such demands. Besides the Bombay cotton mills, which alone would require about 100,000 horse power, there are the tramways with possibilities of suburban extensions. Then there is the Port Trust with its docks and railways in addition to the two large main line railway companies with difficult traction problems and their workshops requiring power. Modern practice has so conclusively proved the benefits

The following are the present Directors—Sir D. Tata, Kt (Tata Sons & Co.), Chairman, Sir Sassoon David, Bart (Sassoon J. David & Co.), Sir Shapurji B. Broacha, Kt (Tamilochandras, C. P.), The Hon'ble Mr. Lajpust Sahmal (as, C. P.), Mr. A. Tana (of Bhavnagar State), Mr. A. N. Datar (of Baroda State), Mr. H. J. Bhambha (late of Mysore State), Mr. Ratan Tata (Tata Sons & Co.), Mr. R. D. Tata (Tata Sons & Co.), Sir Vithaldas Darnodas (Pharacsey, Kt (Pharacsey Mooljee Sons & Co.), Mr. Narottam Morarjee Goculdas (Morarjee Goculdas & Co.), and Mr. A. J. Billimoria (Tata, Sons & Co.)

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The Opium Trade.

The exports of Bengal opium to foreign countries have been in recent years —

Value
Rs 2,01,38,000
Rs 2,09,56,940
Rs 6,71,48,208

Number of chests
1913-14 9,151
1912-13 10,824
1911-12 21,162

Malwa Opium—The poppy from which Malwa opium is manufactured is grown chiefly in the Native States of Indore, Gwalior, Bhopal, Azam, Jharkhand, Nagpur and Kolhar. The British Government has no concern with the cultivation of the poppy, or the manufacture of the opium but it used to regulate, before exports to China were stopped, under the system explained below, the import of Malwa opium into, and the transport through, its territories. As the chief market for Malwa opium was China, and as the States in which the drug is produced had no access to the sea, except through British territory, the British Government were able to impose a duty on the importation of the drug on its way to Bombay for exportation by sea. No statistics of cultivation or production are available. The poppy is sown in November, the plants flower in February, and by the end of March the whole of the opium has been collected by the cultivators who sell the raw opium to the village bankers. It is then bought up by the large dealers who make it up into balls of about twelve ounces and store it up until it is ready for export, usually in September or October. The opium is of 90 to 95 consistency and is packed in half chests consigned while transported to Bombay.

To enable Malwa opium to reach Bombay a pass from the Opium Agent, or his Deputy, was required. This pass was not granted until the duty imposed by the Government of India had been paid. This duty was until 1912 at the rate of Rs 600 per chest but was raised to Rs 1,200 in that year consequent on the introduction of a system similar to that applied to Bengal opium. Under this system the Collector of Customs, Bombay, sold the right of exporting opium to the highest bidder at monthly auction sales. On payment of the price bid and of duty at the enhanced rate the bidder was given a certificate authorising him to import opium from Malwa. The number of chests fixed for export in the year 1913 was 8,860. But out of these only 2,755 were exported during the year owing to the large accumulation of stocks in China that country have ceased since January 1913 and the trade has become extinct since 17th December of that year when the last shipment was made.

Practically the whole of the Malwa opium exported from Bombay went to China. There is no market for it in the Straits Settlements, a few chests annually are shipped to Zanzibar. The quantity and value of exports from Bombay in the last three years were as follows —

Value
Rs 1,40,62,500
Rs 5,86,11,292
Rs 6,87,99,491

Quantity
1913-14 2,755 chests
1912-13 11,205
1911-12 14,039

† Figures not available

Two descriptions of opium must be distinguished. **Raw opium** which is manufactured from poppy grown in the United Provinces, and **Alkaline opium** which is almost entirely produced in certain Native States in Central India and Rajputana.

Bengal Opium—Cultivation of poppy is only permitted under license. The cultivator to whom advances are made by Government is free of interest to sell the whole of his production to the Opium Factory at Ghazipur at a rate fixed by Government, the now Rs 7/8 per seer of 700 consistency. The area licensed for cultivation has in recent years been much reduced as a consequence of the agreement between the Government of India and the Chinese Government, and is now restricted to the United Provinces. The following are the figures of the area under cultivation and of production —

—	Number	Alunds of opium under cultivation	chests made
1911-12	200,672	31,473	23,126
1910-11	362,868	44,926	23,611
1909-10	354,577	67,666	36,172
1908-9	361,832	61,803	33,895
1907-8	488,548	71,340	51,230

At the Factory two classes of opium are manufactured.

(1) "Provision" opium intended for export to foreign countries. This opium is made up in balls or cakes each weighing 3 lbs, 70 cakes weighing 140 lbs being packed in a chest.

(2) "Excise" opium intended for consumption in British India. This is made up in cubic packets each weighing one seer, 60 packets being packed in one chest. It is of higher consistency than "provision" opium.

"Provision" opium is sold by public auction in Calcutta, the quantity to be sold being fixed by Government. This quantity has been reduced in recent years in accordance with the agreement with China, the figures being 15,440 chests in 1911 and 6,700 chests in 1912. Exports to China have been stopped altogether since 1913.

Statistics of Trade

The difference between the cost of manufacture and the price realised at these sales may be regarded as the duty levied by Government —

—	Number of chests sold	Average price realised at auction sales per chest	Average cost of manufacture per chest
1911-12	26,330	2,790	525
1910-11	37,500	2,890	525
1909-10	43,300	1,612	515
1908-9	43,900	1,383	525
1907-8	48,900	1,350	503

Indigenous methods—India possesses a large selection of excellent tanning materials such as *Acacia* pods and bark, Indian mullein, the Tannin, Mangrove, and Myra. That the article produced rarely fetch more than one-fourth the value of the correct tanning article made or imported or Campon (I hope in water) leather and the leather worked up in response to an

WILD BIRDS' PLUMAGE

The Bill for prohibiting the importation into England of wild birds' plumage, which was introduced in 1913, was the nature of a fierce controversy on the occasion of the plumage traffic but organised opposition to the Bill failed to convince the public that the plumage trade was not one of great cruelty. Among well-authenticated cases from India in 1913, in which two men were found for sewing up the eyes of birds so that they should not fight in their cages. It was stated that this was a common practice of fishermen in Sind who breed birds and export their feathers to England. This according to *The Times*, is in which the prohibition on the export of plumage from India is notoriously evaded by smuggling into the open market of England, but shows how easily abuses might arise under any system which gave a general sanction to feather-farming. All legitimate methods of breeding birds for their plumage can be safeguarded as definite exceptions under an Act prohibiting importation, and only the exclusion by law of all plumage not so specified can put England abreast of the United States and of her own dangerous Dominion in the suppression of a barbarous industry.

Plumage birds—The birds most killed on account of their plumage in India are peacocks, Kingfishers, bustards, junglefowl, egrets, pheasants, partridges, peafowls, and hoopoes. Perhaps the most extensively killed in the past has been the Blue Jay (*Coracias Indica*). The smaller Egret is met with throughout India and Northern Burma. It is a pure white slim heron which develops during the breeding season a dorsal train of feathers, which elongates and becomes "decomposed" as it is expressed, that is to say, the bars are separate and distinct from each other, thus forming the ornamental plume or aggregate for which these birds are much sought after and ruthlessly destroyed. Thirty years ago the exports

BREWERIES.

Statistics compiled from official returns show that there were, in 1912, 22 breweries in British India, of which one did not work during the year. Fifteen of these are private property and seven are owned by six joint-stock companies with a nominal capital of Rs 26,71,000, of which Rs 22,20,200 was paid up at the end of 1912-13. Eight of the breweries are located at stations in the Himalayas from Alwar to Darjeeling. The largest brewery is the one at Lucknow, the Bangalore, Solan, Rawalpindi, Kasauli, Dehra, and Meerut. Production was largest in 1902, since when it has tended to decline, while imports of foreign beer have increased proportionately except during the war. In the year 1907, the process was reversed, and imports decreased.

Legislation—Indian legislation on the subject will be studied with interest by those who have followed the course of legislation on this subject in other countries. Until 1887 no legislation was considered necessary in India. An Act of that year enabled local governments and municipal and cantonment authorities to make rules prohibiting under penalties the sale or possession of wild birds recently killed or taken during their breeding seasons, and the importation into any municipal or cantonment area of the plumage or any wild birds during those seasons, and local governments were empowered to apply these provisions to animals other than birds. Afterwards, in 1902, action was taken under the Sea Customs Act to prohibit the exportation of the skins and feathers of birds, except feathers of ostriches and skins and feathers exported *bona fide* as specimens illustrative of natural history. Act VII of 1912 goes much further than the previous law. It schedules a list of wild birds and animals to which the Act is to apply in the first instance, enables local governments to extend this list, empowers local governments to establish "close times," presumably during the breeding seasons, in the whole of their territories or in specified areas, for wild birds and animals to which the Act applies, and imposes penalties for the capture, sale, and purchase of birds and animals in contravention of the "close time" regulations, and for the sale, purchase and possession of plumage taken from birds during the close time. There is power to grant exemptions in the interests of scientific research, and there are savings for animal in defence of himself or of any other person, and for the capture or killing of any wild bird or animal in *bona fide* defence or property.

[illegible]

GRAIN ELEVATORS.

The question of adopting elevators for the handling of Indian grain has engaged attention for some time and has assumed importance in the light of the railway congestion experienced in recent years and more particularly in the grain season. In the last three years great strides have been made by other countries in the adoption or perfecting of the elevator system, and a large mass of contemporary data on the subject has been brought together by the Commercial Intelligence Department. Since the subject is one that cannot receive adequate consideration in India till the facts are before the public, these have been embodied in a pamphlet entitled *Indian Wheat and Grain Elevators* by the late Mr. E. Noel-Paton, Director General of Commercial Intelligence, to the Government of India. The work gives full particulars regarding India's production of wheat, and shows that less than one-fifth of the crop is exported. It describes the conditions under which the grain is held and the risks that it runs. It is pointed out that the miller for his no adequate means of preserving his wheat and that he is compelled to sell it at harvest time also that the prices then obtained by him are considerably lower than those usually current in later months. The constant nature of the European demand is explained and an attempt is made to gauge the probability that the enormously increased quantities of wheat to be exported when new irrigation tracts come into bearing would be accepted by Europe at one time and at a good price, or could be economically transported under a system in which a few months of congestion alternated with a longer period of stagnation. Figures are given which suggest that in practice the effect of equipping railways to do this is to intensify the evil and so to increase in a vicious circle. The author explains the structural nature of elevators and their functions as constituted in other countries. Particulars are given as to the laws that govern their operation in such countries.

TRADE MARKS

The Indian Merchandise Marks Act (IV of 1889) was passed in 1889, but its operation in the earlier years was restricted, especially in Calcutta, in consequence of the lack of adequate facilities for the registration of marks.

[illegible]

INDIAN COMMERCIAL CONGRESS

A proposal was recently made by the Hon'ble Sir Fazlulhoy Chundaboy for the holding of periodical conferences of representatives of the several Chambers of Commerce in India. The suggestion was taken up by the Indian Secretary, Chamber and Bureau in Bombay and this body referred to the several Chambers of Commerce and Commercial Associations a Draft Constitution of the proposed Indian Commercial Congress. The objects of the Congress are stated as follows—(1) The Indian Commercial Congress is founded for the purpose of promoting by all legitimate and constitutional methods the best interests of trade, commerce and manufactures of the country and all cognate matters connected therewith. (2) For the fulfilment of the objects aforesaid, the Congress shall hold its session from time to time as occasion may demand, but at least once every three years, at such place and at such date as may be determined, discuss all mercantile and industrial affairs, prepare and submit representations thereon to the Provincial Governments, or the Government of India or the Secretary of State or the British Parliament or other authorities for the removal and prevention of injurious commercial measures and the introduction of others which may be calculated to promote the general commercial and other cognate interests of the country, and otherwise to take such action as may be conducive to the

INVENTIONS AND DESIGNS.

The Inventions and Designs Act (No V) of 1888 was replaced by the Indian Patents and Designs Act (No II) of 1911, which came into force on the 1st January 1912. The object of the Act was to provide a simpler, more direct, and more effective procedure in regard both to the grant of patent rights and to their subsequent existence and operation. The changes made in the law need not here be referred to in detail. They gave further protection both to the inventor, by providing that his application should be kept secret until acceptance, and to the public, by increasing the facilities for opposition at an effective period at the same time a Controller of Patents and Designs was established, with power to dispose of many matters previously referred to the Government-General in Council, and provision was made for the grant of a "patent" instead of for the mere recognition of an "exclusive privilege." The provisions of the Act follow with the necessary modifications those of the British Inventions and Designs Act of 1907.

The records of proceedings under the Act of 1888 show a steady, though not very rapid increase in recent years in the number of applications for leave to file specifications. The number of applications received increased from 521 in 1902 to 807 in 1911, and the number of specifications filed (i.e., of "exclusive privileges" required) from 375 to 603. The total number of applications under the Act up to the end of 1911 was 11,679, as the result of which 9,113 specifications were filed. The number of patents in force at the end of 1911 was 2,917. Only a small proportion of the

Applications—some 60 or 70 a year—came during the decade from Indians. The majority came from persons not resident in India. The range of inventions for which protection was sought was very wide, inventions connected with railways, electrical contrivances, and chemical appliances and preparations being most numerous.

The latest statistics available for the year 1912 are as follows—

No of applications received for leave to file a specification 678
 " patents sealed 354
 Subject of applications—
 Bicycles and similar vehicles 35
 Tea trade 11
 Railways 67
 Lamps and Burners 16
 Electrical Contrivances 47
 Spinning and Weaving Machines 20
 Water-lifts and Pumps 15
 Sugar cane and other Mills 5
 Chemical Appliances and Preparations 104
 Treatment of metals 20
 Improvements in Building and Flying Machines 27
 Tailoring Machines 16
 Others 280

No of applications for registration of designs 343
 No of designs registered 333
 Income from Fees 4,501

varies throughout all India from the Bengal and railway pound of 82.27 lbs to the Factory pound of 74 lbs 10oz 11dwt, the Bombay standard of 82 lbs, which apparently answers to the Forest Department pound in use at the Forest Depot, and the Madras pound, which some authorities estimate at 82 lbs and others at 81 lbs and so on.

Committees of Inquiry—These are merely typical instances which are multiplied indefinitely. There are variations of every detail of weights and measures in every part of India. The losses to trade arising from the confusion and the trouble which this state of things causes are heavy. Municipal and commercial bodies are continually returning to the problem with a view to devising a practical scheme or reform. The Supreme and Provincial Governments have made various attempts during 40 years past to solve the problem of uniform units of weights and measures and commerce and trade have agitated about the question for the past century. The Indian railways and Government departments adopted a standard tola (180 grains) seer (80 tolas) and manand (40 seers) and it was hoped that this would act as a successful "lead" which would gradually be followed by trade throughout the empire, but the expectation has not been realised.

The Government of India considered the whole question in consultation with the provincial Governments in 1890-1894 and various special steps have at different times been taken in different parts of India. The Government of Bombay appointed a committee in 1911 to make proposals for reform for the Bombay Presidency. Their final report has not been published, but they presented in 1912 an *ad interim* report which has been issued for public discussion. In brief, it points out the practical impossibility of proceeding by compulsory measures affecting the whole of India. The Committee stated that over the greater part of the Bombay Presidency a standard of weights and measures would be heartily welcome by the people. They thought large areas subject to many diverse conditions of trade and social life would not result in bringing about the desired reform so successfully as a "lead" supplied by local legislation. During the course of three years, indeed, the people to adopt throughout the district uniform weights and measures, the unit of weight in this case being a tola of 180 grains. But the committee abstained from recommending that the same weights and measures should be adopted over the whole Presidency, preferring that a new system should be introduced, leaving that as nearly as possible similar to the best system already prevailing there.

Proposals from England—Suggestions have been made by the British Association and the British Weights and Measures Association and the Decimal Association, respectively, at different times that British weights and measures and the decimal system should be introduced. Both proposals fail to meet the special requirements set forth by the Bombay Committee. Variations of the system which have been put forward by different bodies in India in recent years are that the English pound weight and the English hundred weight should be adopted as the unit of weight for all India. The argument in favour of the importation of an outside unit in this manner is that people in India will always associate with a given, familiar denomination of weight or measure the value they have been accustomed to consider in regard to it, but that a new weight were introduced they would learn to use it in dealing with their neighbours, without the interference of anything resembling prejudice at what they might regard as an attempt to tamper with their old, traditional standards of dealing.

Committee of 1913—The whole problem was again brought under special consideration by the Government of India in October, 1913, when the following committee was appointed to inquire into the entire subject anew—
 Mr C A Silliburn (President)
 Mr A Y G Campbell
 Mr Rustomji Faridoonji
 This Committee reported, in August, 1915, in favour of a uniform system of weights to be adopted in India based on the 180 grain tola. The report says—Of all such systems and best known is that known as the Bengal or Indian Railway weights. The introduction of this system involves a more or less considerable change of system in parts of the United Provinces (Gorakhpur, Bareilly and neighbouring areas), practically the whole of Madras, parts of the Punjab (rural portions of Amritsar and neighbouring districts), of Bombay (South Bombay, Bombay city and Gujarat), and the North West Frontier Province. Burma has at present a separate system of its own which the committee think it should be permitted to retain. The systems recommended are—

FOR INDIA

8	kilashas	1 chinal
8	catinials	1 ratli
8	malas or 4 tins	1 mashra
12	malas or 4 tins	1 tola
5 tolas		1 khatab
10 chitaks		1 seer
40 seers		1 manand
5 small yves		1 large yve
2 pes		1 mu
5 pes or 2 mus		1 mrit
1 mrit		1 ngannu
1 ngannu		1 tilal
100 tilals		1 peltila or vis

FOR BURMA

The tola is the tola of 180 grains, equal to the rupee weight. The tola has recently been fixed at 3.60 lbs or 1.10 tolas. The recommendations of the Commission will require approval and have been referred to the Provincial Governments for their consideration.

increase it to a strength sufficient to cope with boiler inspection, their whole time is given to factory inspection. The District Magistrate remains an inspector, ex officio, under the new Act, and other officers may be appointed additional inspectors, but it is contemplated that inspection by ex officio inspectors will be to a large extent discontinued, or limited to special cases.

FACTORIES INSPECTED UNDER THE FACTORY ACT.

PROVINCE	Number of Factories working and liable to be inspected	Average of Number of Hands employed daily	Number of Persons convicted for breach of Act	Fatal	Number of Accidents Reported		
					Serious	Minor	Total
Bengal	322	320,087	7	54	512	547	1,113
Bihar and Orissa	26	23,722	1	1	38	83	122
United Provinces	201	54,803	14	9	108	173	290
Punjab	208	32,865	4	7	61	196	264
North-West Frontier Province	4	241					
Burma	438	50,723	1	13	150	186	349
Central Provinces and Berar	475	47,260	59	5	37	130	172
Madras	268	65,191	3	2	15	449	466
Bombay	687	259,845	16	30	85	1,476	1,591
Assam	16	2,901			2	2	4
Ajmer-Merwara	9	11,996		1	11	125	137
TOTAL IN 1912							
	2,654	869,643	104	122	1,019	3,367	4,508

_____ according to the date of establishment.

Year	Company Name	Province	Branch
1820	Madras Provident (exempted under Section 41 of Madras Widows)	Bombay	United Provinces, Assam, Ameer, Mirwar
1833		Bombay	
1847		Bombay	
1840	Princess's Widows' Fund	Bombay	
1871		Bombay	
1874	Bombay Mutual Oriental	Bombay	
1870	Bombay Widows'	Bombay	
1885	Ganesh Mutual	Bombay	
1886		Bombay	
1887		Bombay	
1888	Mangalore Roman Catholic B. B. & C. I. Zoroastrian	Bombay	
1889	Bombay Zoroastrian	Bombay	
1890		Bombay	
1891	Unjui Zoroastrian	Bombay	
1892	Indian Life	Bombay	
1893	Hindu Provident Fund	Bombay	
1894		Bombay	
1895		Bombay	

Chambers of Commerce.

Modern commerce in India was built up by merchants from the west and was for a long time entirely in their hands. Chambers of Commerce and numerous kindred associations were formed by them for its protection and assistance. But Indians have in recent years, taken a large and growing part in this commercial life. The extent of their participation varies greatly in different parts of India, according to the natural privileges and genius of different races. Bombay, for instance, has led the way in the industrial and commercial regeneration of the new India, while Bengal, very active in other fields of activity, lags behind in this one. Arising from these circumstances we find Chambers of Commerce in Bombay, Karachi, Calcutta, Madras and other important centres, with a membership both European and Indian, but alongside these have sprung up in recent years certain associations, such as the Bombay Indian Merchants' Chamber and Bureau, of which the membership is exclusively Indian. These different classes of bodies are in no sense hostile to one another and constantly work in association.

The London Chamber of Commerce in 1912, realising the increasing attention demanded by the economic development of India, took steps to form an "East India Section," of their organization. The Indian Chambers work harmoniously with this body, but are in no sense affiliated to it, nor is there at present any inclination on their part to enter into such close relationship, because it is generally felt that the Indian Chambers can themselves achieve their objects better and more effectively than a London body could do for them, and on various occasions the London Chamber, or the East India Section of it have shown themselves out of touch with what seemed locally to be immediate requirements in particular matters.

A new movement was started in 1913 by the Hon. Sir Fazlulohy Currimbhoy Ibrahim, a leading millowner and public citizen of Bombay, which promises to lead to great improvement in strengthening Indian commercial organization. Sir Fazlulohy's original plan was for the formation of an Indian Commercial Congress. The proposal met with approval in all parts of India. The scheme was delayed by the outbreak of war but was carried further last year when it was decided to call a first session of the Congress for the 1915 Christmas holiday season, in Bombay. The list of members of the Reception Committee showed that all the important commercial associations of Bombay were prepared to co-operate actively and it was announced that the Congress would have presented to it a scheme for an associated Chamber of Commerce for the whole of India—a Chamber of Indian Chambers of Commerce. The Commercial Congress will be, then, a sort of annual meeting of this Chamber, dealing with all the commercial problems from the general point of view. Different Chambers will be entitled to bring forward their local questions and the Associated Chamber will consider them, provided members representing other Chambers approve of them." The following are the principal paragraphs of a Memorandum of Association of the Associated Indian Chamber of Commerce which was prepared for submission to the Congress—

- (I) The name of the Chamber will be, "THE ASSOCIATED INDIAN CHAMBER OF COMMERCE." Will be in Bombay.
- III The objects for which the Chamber is established are—
 - (a) To discuss and consider questions concerning and affecting trade, commerce, manufactures, and the shipping interests, at meetings of delegates from Indian Chambers of Commerce and Commercial Associations or Bodies and to collect and disseminate information from time to time on matters affecting the common interests of such Chambers and associations or Bodies and the commercial, manufacturing and shipping interests of the country.
 - (b) To communicate the opinions of the (Chambers of Commerce and other Commercial Associations or Bodies separately or unitedly, to the Government or to the various departments thereof, by letter, memorial, deputations or otherwise.
 - (c) To petition Parliament or the Government of India or any Local Government or authority on any matter affecting trade, commerce, manufacture or shipping.
 - (d) To prepare and promote in Parliament or in the Legislative Councils of India, both Imperial and Provincial, Bills in the interest of trade, commerce, manufactures, and shipping of the country and to oppose measures which, in the opinion of the Chamber, are likely to be injurious to those interests.
 - (e) To attain those advantages by united action which each Chamber or Association or body may not be able to accomplish in its separate capacity.
 - (f) To have power to establish an office either in England or in any part of British India with an Agent there, in order to ensure to the various Chambers early and reliable information on matters affecting their interests and to facilitate communication between the Chamber or individual chambers and the Government or other public bodies, and generally to conduct and carry on the affairs of the Chamber.
 - (g) To organize Chambers of Commerce, Commercial Associations or Bodies in different trade centres of the Country.
 - (h) To convene when necessary the Indian Commercial Congress at such places and at such times as may be determined by a Resolution of the Chamber.
 - (i) To do all such other things as may be incidental or conducive to the above objects.

The draft Articles of Association provide for the management of the Chamber by an Executive Council composed of a President, Vice-President, and ten other members elected at the annual meeting of the Associated Chamber, the Executive Council to present a report and

statement of accounts at each annual meeting of the Association. The number of members of the Association shall not exceed one hundred and the Executive Council are given power to elect honorary members. There shall be an annual meeting of the Association on a date to be fixed by the Executive Council in the month of Indian (Purnima) in Bombay on a date to be fixed by the Executive Council in the month of

BENGAL

The Bengal Chamber of Commerce was founded in 1851. Its head quarters are in Calcutta. Other societies connected with the trade and commerce of the city are the Royal Exchange, the Bengal Bonded Warehouse Association, the Calcutta Trade Association and the Bengal National Chamber of Commerce. The Bengal Chamber of 200. Its objects are the usual purposes connected with the protection of trade "in particular in Calcutta." There are two classes of members, Permanent and Honorary.

Merchant-bankers, shipowners, representatives of commercial, railway and insurance companies, brokers, persons and firms engaged in commerce, agriculture, mining or manufacture, and joint stock companies or other corporations formed for any purpose or object connected with commerce, agriculture, mining or manufacture, and persons engaged in or connected with art, science or literature, may be elected as permanent members of the Chamber. A candidate for election as a permanent member whether an individual, a firm or a joint stock company or other corporation, must be proposed by one and seconded by another permanent member, and may be elected provisionally by the Committee, but that election is subject to confirmation at the next annual general meeting. The subscription to the funds of the Chamber of permanent members residing or carrying on business in Calcutta is Rs 25 per annum, and that of permanent members residing or carrying on business elsewhere than in Calcutta Rs 32 per annum. No entrance fee is charged. Honorary members are not required to subscribe to the funds of the Chamber. Officials and others indirectly connected with the trade, commerce or manufactures of Bengal, or who may have rendered distinguished service to the interests represented by the Chamber, may be elected honorary members by the Committee upon the proposal of two permanent members visiting the Presidency or not. Strangers whether members of the Committee may be admitted by the Committee as honorary members for a period not exceeding two months on the proposal of any permanent member whether a member of the Committee or not. Honorary members are entitled to receive the last published report of the Committee, and to attend and speak but not to vote at any general meeting held during their membership, and may upon the invitation of the President, Vice-President or Chairman, as the case may be, attend under the like conditions any meeting of Committee or of any departmental committee or sub-committee.

The affairs of the Chamber are conducted by the following officers, namely, a President, Vice-President seven ordinary members of Committee, a Secretary and two Assistant Secretaries. The allots of the Chamber are conducted to numerous subsidiary associations. The Committee of the Chamber are conducted to various other bodies of less importance, such as the Bengal Chamber of Commerce —

Calcutta Port Commission—Messrs A. A. Vasta (Ralli Bros.), W. E. Cram (Graham Bros.), W. E. Cram (Graham & Co.), D. Carmichael (Jacksom, Mackenzie & Co.), A. C. Patterson (Becker, Gray & Co.), S. Bursace (Rilliburn & Co.), Hon. Mr. E. H. Stewart, C.L.E. (Gladstone, Wyllie & Co.)

Calcutta Municipal Corporation—Messrs A. C. Patterson (Becker, Gray & Co.), T. R. Pratt, W. R. Rae (Sun Insurance Office), and Shirley Tremaigne (W. H. Targett & Co.)

Bengal Boiler Commission—Messrs G. L. Thomson (Barnagore Jute Factory Co., Ltd.), G. F. Scott (Bengal Coal Co., Ltd.) and J. Wilson (Jessop & Co., Ltd.)

Board of Trustees of the Indian Museum—Mr. J. B. Lloyd (Shaw, Wallace & Co.)

Calcutta Wheat and Seed Trade Association, Indian Tea Mills, Association, Indian Tea Traders' Association, Calcutta Tea Traders' Association, Calcutta Fire Insurance Agents' Association, Calcutta Import Trade Association, Calcutta Marine Insurance Agents' Association, Calcutta Spirit and Beer Association of India, The Wine, Spirit and Beer Association of India, Indian Mining Association, Calcutta Baled Jute Association, Indian Paper Makers' Association, Indian Engineering Association, Jute Traders' Association, Calcutta Dy- draulic Press Association, Jute Fabric Brokers' Association, Jute Shipper's Association and European Jute Dyers' Association.

The Chamber maintains a tribunal of arbitration for the determination, settlement and adjustment of disputes and differences relating to trade, business, manufactures, and to customs of trade, between parties, all or any of whom reside or carry on business personally or by agent or otherwise in Calcutta, or elsewhere in India or Burma, by whomsoever such parties the said disputes and differences be submitted. The Secretary of the Chamber acts as the Registrar of the Tribunal, which

The Chamber also maintains a Licensed Measurers Department controlled by a special committee. It includes a Superintendent (Mr. A. H. Lugg) and three Assistant Superintendents and the staff of 15 officers. The usual system of work for the benefit of the trade of the port is followed. The Department has its own provident fund and compensation fund and Messurers' Club. The Chamber does not assist in the preparation of official statistical returns and its Monthly Supplement and also publishes a large number of statistical circulars of various descriptions in addition to a monthly abstract of proceedings and many other circulars on matters under discussion.

The Chamber also maintains a list of such members and assistants

glisters from time to time makes a list of such willing to serve on the Tribunal. The Registrar otherwise be selected by the Registrar and others as may, from time to time, annually or consists of such members or assistants to mem-

BOMBAY.

The object and duties of the Bombay Chamber, as set forth in the rules and regulations, are to encourage a friendly feeling and unanimity among commercial men on all subjects involving their common good, to promote and protect the general mercantile interests of this Presidency, to collect and classify information on all matters of general commercial interest, to obtain the removal, as far as such a Society can, of all acknowledged grievances affecting merchants as a body, or mercantile interests in general to receive and decide references on matters of usage and custom in dispute, recording such decisions for future guidance, and by this and such other means, as the Committee for the time being may think fit, assisting to form a code of practice for simplifying and facilitating business, to communicate with the public authorities, with individuals, on all subjects of general mercantile interests, and to arbitrate between parties willing to refer to, and abide by, the judgment of the Chamber.

The Bombay Chamber was established in 1836, under the auspices of Sir Robert Grant, who was then Governor of the Presidency, and the programme described above was embodied in their first set of rules. There are now affiliated with the Chamber the Bombay Mill-owners' Association, which exists to carry out the same general objects as the Chamber in the special interests of "millowners and users of cotton and water power," and the Bombay Cotton Trade Association, which similarly exists for the special benefit of persons engaged in the cotton trade. According to the latest returns, the number of members of the Chamber is 122. Of these 16 represent banking institutions, 7 shipping agencies and companies, 3 firms of solicitors, 3 railway companies, 2 insurance companies, 6 engineers and contractors. 71 firms engaged in general mercantile business.

The affairs and funds of the Chamber are managed by a committee of nine ordinary members, consisting of the chairman and deputy-chairman and seven members. The committee must, as a rule, meet at least once a week and the minutes of its proceedings are open to inspection by all members of the Chamber, subject to such regulations as the committee may make in regard to the matter. A general meeting of the Chamber must be held once a year and ten or more members may requisition, through the officers of the Chamber, a special meeting at any time, for a special purpose.

The Chamber elects representatives as follows to various public bodies —

Legislative Council of the Governor-General one representative. The Chamber may elect anyone, but in practice they have hitherto returned their chairman

Legislative Council of the Governor of Bombay one representative, who may also be a member, but is, in practice, always the deputy-chairman.

work in the Customs House and have freely placed at their disposal by the Chamber authorities. They compile all the statistical information in connection with the trade of the port, in both export and import divisions, which it is desirable to record. No other Chamber in India does similar work.

The Bombay Chamber publishes a Daily Arrivals Return which shows the receipts into Bombay of cotton, wheat and seeds, and a Daily Trade Return, which deals with trade by sea and shows in great detail imports of various kinds of merchandise and of treasure, while the same return contains particulars of the movements of merchant vessels.

The Chamber publishes twice a week detailed reports known as Import and Export summaries, which give particulars of the cargo shipped by each steamer to and from Bombay.

Three statements are issued once a month. One shows the quantity of exports of cotton, seeds and wheat from the principal ports of the whole of India. The second gives in detail imports from Europe, more particularly in regard to raw cottons, dyed cloth, Turkey red and soft cloths, printed and dyed goods, fancy cloth of various descriptions, woollens, yarns, metals, kerosene oil, coal, anniline dyes, sugar, matches, wines and other sundry goods. The third statement is headed, "Movements of Piece Goods and Yarn by Sea," and shows the dispatches of imports and local manufactures of piece goods and yarn from Bombay to other centres of trade served by the railways.

The "Weekly Return" issued by the Chamber shows clearances of a large number of important descriptions of merchandise, a return of current quotations" is issued once a week, on the day of the departure of the English mail, and shows the rates of exchange for Bank and Mercantile Bills on England and Paris, and a large quantity of general banking and trade information.

The annual reports of the Chamber are substantial tomes in which the whole of the affairs of the Chamber and the trade of the port during the past year are reviewed.

The Chamber has also a Measurement Department with a staff of twelve, whose business is that of actual measurement of exports in the docks before loading in steamers. Certificates are issued by these officers with the authority of the Chamber to shippers and ship agents as to the measurement of cotton and other goods in bales or packages. The measurers are in attendance on the quays whenever there are goods to be measured and during the busy seasons are on duty early and late. The certificates granted show the following details—

- (a) the date, hour and place of measurement
- (b) the name of the shipper
- (c) the name of the vessel,
- (d) the port of destination,
- (e) the number and description of packages,
- (f) the marks;
- (g) the measurement, and, in the case of goods shipped by boats,
- (h) the registered number of the boat,
- (i) the name of the tidal

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- (h) the registered number of the boat,
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One of the most important functions performed by the Chamber is that of arbitration in commercial disputes. Rules for this have been in existence for many years and have worked most satisfactorily. The decisions are in all cases given by competent arbitrators appointed by the General Committee of the Chamber and the system avoids the great expense of resort to the Law Courts.

A special department of the Bombay Chamber is its Statistical Department, which prepares a large amount of statistical returns connected with the trade of the port and of great importance to the conduct of commerce in the department consists of eleven Indian clerks who, by the authority of Government,

Bombay Millowners' Association.

The Bombay Millowners' Association was established in 1875 and its objects are as follows—

- (a) The protection of the interests of millowners and users of steam water and/or electric power in India.
- (b) The promotion of good relations between the persons and bodies using such power.
- (c) The doing of all those acts and things by which these objects may be furthered.

Any individual partnership or company, owning one or more mill or one or more presses, one or more ginning or other factory or factories actuated by steam, water, electric or other power is eligible for membership, members being elected by ballot. Every member is entitled to one vote for each mill which is—

- (a) owned by such member,
 - (b) subscribed for according to the rules of the Association by such member, and
 - (c) worked by motive power separate and distinct from the motive power by which any other mill is worked.
- If two or more mills are owned by any one member but are worked by one motive power, the member in question shall be entitled to one vote only in respect of the two mills.
- The membership of the Association in 1915 numbered 82.

The following is the Committee for 1915—

Mr Jehangir B Petit, (Chairman), Mr N B Saklatwala, (Deputy Chairman), Sir Dunsshaw M. Petit, Bart, The Hon'ble Sir Fazlulhoq Currimbhoy, Kt, Sir Vithaldas D Thackersey, Kt, Mr I R Alder, the Hon'ble Mr Munimohandas Ramji, Mr J E Bradbury, Mr B Brown, Mr Rahimtoola Currimbhoy, Mr N G Hunt, Mr Govasjee Jhangir (Jm), Mr I H. Latimer, Mr C V Nichte, Mr Meyer Nissim, Mr Dinshaw E Wadia, Mr C N Wadia, Mr N N Wadia

Mr R. E Gifford-Pearse, Secretary
Mr Noel-Wilkinson, B A, Asst. Secretary
The following are the Association's Representatives on public bodies—
Thackersey, Kt
City of Bombay Improvement Trust, Sir Sassoon David, Bart
Victoria Jubilee Technical Institute, Mr Jehangir Bomanjee Petit
Messrs J E Bradbury & W A Sutherland
Bombay Smoke Nuisances Commission,
Advisory Board of Sydenham College of Commerce and Economics, Mr N N Wadia

Indian Merchants' Chamber
The Bombay Indian Merchants' Chamber and Bureau was established in 1907 with the following objects—"To encourage a friendly feeling and unanimity among commercial men

on all subjects involving their common good, to promote and protect the trade, commerce and manufactures of India and in particular of the Presidency of Bombay, to consider and deliberate on all questions affecting the rights of Indian Merchants, to represent to the Government their grievances, if any, and to obtain by constitutional methods the removal of such grievances, to collect and compile and distribute in such manner as may be most expedient for purposes of disseminating commercial and economic knowledge, all statistics and other information relating to trade, commerce and finance, specially Indian as well as to form and maintain a library, and generally to do all such matters as may promote the above objects in view, to arbitrate between parties willing to refer to and abide by the judgment of the Chamber, to receive and decide references of matters of usage and custom in disputes, recording such decisions for future guidance and assisting by this and such other means, as the committee for the time being may think fit, to form a code of practice so as to simplify and facilitate the transaction of business." The Chamber has not yet taken up the work of arbitration, measurements, etc

The following bodies are connected directly and indirectly with the Chamber, though no public body is directly affiliated to it—
The Bombay Native Piece Goods Merchants' Association (which sends a large number of representatives),
The Grain Merchants' Association which is a member,
The Hindustani Native Merchants' Association (which is a member),
The Bombay Commission Agents' Association, The Bombay Native Piece Goods Merchants' Association jointly with the Bombay Native Piece Goods Merchants' Association and a representative to the Board of Trustees for the Port of Bombay, whenever it is so notified by the Government (vide Act No 1 of 1909). The Chamber also has the right to elect a representative on the Board of the Sydenham College of Commerce and Economics, Bombay.

Any person engaged in mercantile pursuits or interested in trade and commerce desirous of joining the Chamber is eligible for membership, there being two classes of members, viz, Ordinary and Honorary. Ordinary members shall be (1) Resident members who pay Rs 30 annual fee and (2) Absent members who pay Rs 5 as annual fee. An ordinary member also pays an entrance fee of Rs 50 on being elected. Gentlemen distinguished for public services or eminent in commerce and manufactures or otherwise interested in the aims and objects of the Chamber may be elected as Honorary members by a General Meeting of the Chamber on the recommendation of the Committee and as such are exempted from paying subscriptions. They are not entitled to vote at any meeting of the Chamber nor are they eligible to serve on the Committee. They are, however, supplied with all the publications of the Chamber free of charge.

— der, wieweit man es möglich
 ist, die von den Konsolidations-
 gesetzen abweichenden Verhältnisse
 zu beseitigen und die einheitliche
 Regelung herzustellen.

(Latter in Mr H R Graves, (Graves Cotton & Co) D P T, London—Mr Osborne Marshall, (Dorman & Co) J Hart, Wm F I Wilmshurst, (Gill & Co), Lloyds, (Hilli Bros), C W Bruin, (Rui & Co) M F Bush, (Bombay Co, Ltd.) Hoar, Mr V Horst (Forbes, Forbes, Campbell & Co) and P Scott (J R Chynell & Co) Secretary—Mr R D Gregor-Pearse

Native Piece-Goods Association

[illegible]

The following are the Officers for the
 current year —
 Chairman—The Hon Mr Mammobandas
 Kamlu
 Deputy Chairman—Mr Gopalji Vaji Sunderji
 Hon Joint Secretaries—Messrs Purnobhram
 Kashi and Vilaldas Damodar Gokindji
 Hon Treasurer—Mr Mathuradas Haidas
 Grain Merchants' Association.

Grain Merchants' Association.

the interests of the merchants and to put the grain and sundry trade on a sound footing." It is an influential body of large membership. The office holders for the current year are as follow—

Chairman—Mr Hiral Mulji, Messrs Dhani,
 Lami & Co
 Vice Chairman—Mr Vaji Lakhamsi, B A,
 Non Secretary—Mr Shamji Shetye
 Secretary—Mr Lakhshaker Harprasad

KARACHI

The objects and duties of the Karachi Chamber are set forth in terms similar to those of Bombay qualifications for membership are also similar. Honorary membership is conferred upon any person interested in the affairs and objects of the Chamber, subject to election by the majority of the votes of members. All new members joining the Chamber pay Rs. 100 entrance fee and the monthly subscriptions is Rs. 6 for any member contributing Rs. 600 to the Chamber Fund, in addition to the subscription for the Chamber's periodical returns is Rs. 5 per month. The affairs of the Chamber are conducted by the executive committee, and its 12 without such contribution 120 members.

of the Chamber are managed by a committee of ten members, consisting of a Chairman, Vice Chairman and eight members, elected at the annual meeting of the Chamber in January or immediately after. The Chamber elects a representative on the Bombay Legislative Council and three representatives on the Karachi Port Trust. There were last year 54 members of the Chamber, and 7 Honorary Members.

The following are the officers of the Chamber for the current year —

Chairman—The Hon Mr M de P Webb, CBE (Forbes, Forbes, Campbell & Co)

Vice Chairman—J T Murray (Ewart, Ryrie & Co)

Managing Committee—Messrs H G Poughon (Donald Graham & Co), J Leuz (Volpert Brothers), J N Metara (Khalil Bros), W U Nicholas (Anderson & Co), H H Sawver (David Sassoon & Co), S J Stephen (National Bank of India Ltd), J B Trevelyan (N-W Railway), and S C Woodward (Clements, Robson & Co)

Representative on the Bombay Legislative Council—The Hon Mr M de P Webb, CBE

The following are the principal ways in which the Chamber gives a special assistance to members regarding the custom of the trade or of the Port of Karachi. The Committee undertake to nominate European surveyors for the settlement of disputes as to the quality or condition of merchandise as to the quality or condition of both parties desire the Chamber to do so. When two members of the Chamber or when one member and a party who is not a member have agreed to refer disputes to the arbitration of the Chamber or of an arbitrator or arbiters nominated by the Chamber, the Committee will undertake to appoint under the authority of the Chamber a public measurer. A public measurer is appointed to measure pressed bales of cotton, wool, hemp, hides and other merchandise in Karachi.

Representative on the Karachi Port Trust—The Hon Mr M de P Webb, CBE, Mr James Kenyon, Mr J H Ryrie

Secretary—Mr D I Rogers

Public Treasurer—Captain S Mylchreest

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MADRAS.

The Madras Chamber of Commerce was founded in 1886. All merchants and other persons engaged or interested in the general trade, commerce and manufactures of Madras are eligible for membership. Any assent, signing a form or signing *per pro* for a firm is eligible. Members who are absent from Madras but pay their subscriptions may be represented in the Chamber by their powers-of-attorney, as honorary members, subject to ballot. Honorary members thus elected are entitled to the full privileges of ordinary members. Election for membership is by ballot at a general meeting, a majority of two-thirds of the recorded votes being necessary to secure election. Every member pays an entrance fee of Rs 100, provided that banks, corporate bodies and mercantile firms may be represented on the Chamber by one or more members and are liable for an entrance fee of Rs 100 once in ten years each. The subscription shall not exceed Rs 100 per annum, payable quarterly in advance, subject to reduction from time to time in accordance with the state of the Chamber's finances. Absentees in Europe pay no subscription and, members temporarily absent from Madras pay one rupee per month. Honorary members are admissible to the Chamber on the usual conditions. Members becoming insolvent cease to be members but are eligible for re-election without repayment of the entrance donation.

The Chamber undertakes arbitrations and surveys, the granting of certificates of origin and the registration of trade marks. One of the rules for the last named is "that no trade mark on which shall be registered on behalf of an Indian firm trading under a European name."

The following publications are issued by the Chamber:—Madras Price Current and Market Report, Tonnage Schedule and Madras Landing Charges and Harbour Dues Schedule.

—to be —

The Southern India Chamber of Commerce has its Registered Office in Madras. The objects of the Chamber are those usual for such bodies, concerning the promotion of trade, especially in the Madras Presidency, and the interests of members. Special objects are stated to be —

• Southern India Chamber.

Indian Vice Cons Committee—Mr J C Arim —Mr A J Yorke (in Europe)

British Imperial Council of Commerce, London

Woodroffe & Co)

Madras Municipal Corporation—Messrs T W Krishna (Wilson & Co), A J Leach (P. A. Taylor & Co) and J R Simpson (Gordon, Thongair (Madras Trades Association)

Finance, Messrs C B Simpson (Banyan & Co, Ltd), Gordon Fraser & Co, Ltd, H Green III, (M & S M Railway), and J H

Madras Port Trust—The Hon Sir Hugh Str Lough Esqrs

Madras Legislative Council—The Honorable Sir Hugh Str Lough Esqrs

The following are bodies to which the Chamber are entitled to elect representatives, and the representatives elected last year —

Secretary—Mr A E Lawson, CBE

Committee—Messrs J C Armstrong, R Simpson, R U

Vice Chairman—The Hon Sir Hugh Str Lough Esqrs

Chairman—Mr Gordon Fraser

There are 40 members and five honorary members of the Chamber in the current year and the officers and committee for the year are as follows —

To maintain a library of books and publications of commercial interest, so as to diffuse commercial information and knowledge amongst its members.

"To establish Museums of commercial products or organise exhibitions, either on behalf of the Chamber or in co-operation with others."

There are two classes of members, permanent and honorary. The usual conditions as to eligibility for election prevail.

The "Tutorin" (Tutorin) Association is affiliated to the Chamber. The right of election is two representatives to the Vidya Port Trust.

UPPER INDIA CHAMBER.

Committees have power to communicate only with the Central Committee.

The Chamber appoints arbitration Tribunals for the settlement and adjustment of disputes when invited to do so, members of the Tribunal being selected from a regular printed list of arbitrators.

The Chamber has in the present year 60 members, four honorary members and five affiliated members.

The following are the officers—

President—The Hon. Mr. I. P. Wilson (Cooper, Allen & Co., Ltd.).

Vice-President—Mr. B. B. Briscoe (Ligum Mills Co., Ltd.).

Members—Messrs. K. M. Bhatnagar (Allahabad Bank, Ltd.), Mr. A. S. Bond (E. I. R.), O. Malley (Cawnpore Cotton Mills), W. D. Edleston (Empire Engineering Co.), A. W. Liley (Cawnpore Woollen Mills), W. Smith (Nair Mills Co.), Dabu Ram Narain (Ram Narain Buidlads).

Secretary—Mr. J. G. Ryan.

Honorary Secretaries—Mr. R. K. P. N. Nuthan, Naidu Garu, B. A., and Moulana Abdus Subhan Sahib.

Asst. Secretary—C. Duraiswami Aiyangar.

The Upper India Chamber of Commerce is concerned with trade, commerce and manufactures in the United Provinces and has its registered office at Cawnpore. Members are elected by the next general meeting of the Chamber. Non-voting members are elected on the usual qualification, but can neither serve in the Committee nor vote at meetings of the Chamber. There is no entrance fee for membership, but subscriptions are payable as follows—A firm company or association having its place of business in Cawnpore, Rs. 200 a year, an individual member resident or carrying on business in Cawnpore, Rs. 100, firms or individuals having their places of business or residences outside Cawnpore pay half the above rates, but the maintenance of a branch office in Cawnpore necessitates payment of full rates.

The affairs and funds of the Chamber are managed by a Committee of ten members, which has power to constitute Local Committees, of from four to seven members each, at trade centres where membership is sufficiently numerous to justify the step. Such Local

PUNJAB

The Punjab Chamber of Commerce has its current year—

President—Mr. F. C. Waller (Messrs. F. C. Waller & Co.).

Members—Mr. C. Bickley, Roe (The Punjab Banking Co., Ltd.), Mr. J. G. Roberts (Guthrie & Co.), Mr. A. S. Bond (East Indian Railway), The Hon. Mr. James Currie (Messrs. James Currie & Co.), Mr. A. F. Gordon (National Bank of India, Ltd.), Mr. D. N. Bhanja (Barr, Parry & Co.).

Representative on Punjab Legislative Council—The Hon. Mr. James Currie.

Secretary—Mr. J. Hinton Denning, F.R.S.A.

UNITED PROVINCES.

A meeting of Indians engaged in the trade and industry of the United Provinces was held at Cawnpore in February, 1914, to inaugurate an Indian Chamber of Commerce for the United Provinces. Representatives of firms in Cawnpore, Meerut, Allahabad, Lucknow, Jyabard and other

Representatives on public bodies for the following are the Officers, Committee and of subscription is Rs. 10 per month. The rate of subscription is no entrance fee. The rate of subscription being interest in membership. Members are elected by ballot, the only members Chamber at Lucknow, Meerut and Allahabad. There are affiliated branches of the Chamber, the North-West Frontier Province and Punjab, the interests on the usual lines in the headquarters at Delhi and exists for the care of merchants.

Places were present. It was unanimously resolved to establish a United Provinces Chamber of Commerce with its headquarters at Cawnpore. The Chamber has been registered under the Indian Companies Act and has been recognised by the Provincial Government.

The following are the office-holders of the Chamber, appointed in 1915 —

President—Raj Bahadur Lal Prayag Narain
Bharava (U I Couper Paper Mills, Lucknow)
Vice-Presidents—The Hon. Lal Bahadur Narain
 Nath, Haji Mahomed Halim and Lal Moholchand

BURMA.

Committee—Mr. Madan Mohan Khanna
 (Newsprint Bank), Mr. Chintamani
 (Oudh Commercial Bank, Luzzabad),
 Babu Bihari Lal (Sri Ganga Cotton Mills,
 Aligarh), Messrs. Dinanath, Aluma Lal,
 Behari Lal, Raj Bahadur Kanhiya Lal and
 Seth Ram Gopal, Cawnpore
Secretary and Joint Secretary—B. Vikramjit
 Singh and Pandit Bishwa Nath Tholal

and others indirectly connected with the trade of the province, or who may have rendered distinguished service to the interests represented by the Chamber, may be elected by the Committee, either on their own motion or on the suggestion of two Members as Honorary Members of the Chamber. Honorary Members are not required to subscribe to the funds of the Chamber.

The Chamber undertakes arbitrations in addition to its ordinary work. It does not publish any statistical returns.

The following are the Officers, Committee and Representatives on public bodies for the current year —

Chairman—The Hon. Mr. A. W. Blinning
 (Binning & Co.)
Vice-Chairman—Mr. E. O. Anderson
 (Bullock Bros & Co., Ltd.)
Committee—Mr. W. Buchanan (Finlay, Tennings & Co., Messrs. B. E. G. Ladd, Gillanders, Arbuthnot & Co.), C. Guinness (Hongkong and Shanghai Banking Corp., Ltd.), E. J. Holberson (Bombay-Burma Trading Corp., Ltd.), H. B. Huddleston, (Burma Railways), Mr. Joakim (Balthazar & Son), J. A. Polson (Irrawaddy Flotilla Co., Ltd.) and J. Scott (Steel Brothers & Co., Ltd.)

Secretary—Mr. C. A. Cutbiss
Representative on the Burma Legislative Council—The Hon. Mr. A. W. Blinning
Representatives on the Rangoon Port Trust Board—Messrs. D. Robertson, W. Buchanan, J. A. Polson, J. Scott
Representative on the Rangoon Municipal Committee—Mr. M. Joakim

COCANADA.

The following are the office-holders of the Cocanada Chamber of Commerce, which has its headquarters at Cocanada, the chief port on the Coromandel Coast, north of Madras. —

Chairman, A. Gardner and B. Eddington
 (Command Co., Ltd.), E. H. D'Cruz
 (Wilson & Co.), A. B. Todd (Simson Bros.), Mr. B. R. Rao Bahadur K. Gurn
 and G. M. Lake (Innes & Co.), W. Mac-Kintosh (Shaw Wallace & Co.), H. J. Hunter (Ripley & Co.) and E. Hurry
Secretary—Mr. J. A. Muller
 (Volart Bros.)

The rules of the Chamber provide "that by the term 'member' be understood a mercantile firm or establishment, or the permanent agency of a mercantile firm or establishment, and duly electing according to the rules of the Chamber, and that all such be eligible, but only members resident in Cocanada can hold office." Members are elected by ballot. The Committee, when called upon by disputing members or non-members of the Chamber, give their decision upon all questions of mercantile usage and arbitrate upon any commercial matter referred to them for final judgment. In the former case a fee of Rs. 10 and in the latter a fee of Rs. 32 must accompany the reference. The Committee consists of 4 members, including the Chairman, and 2 supplementary members.

All corporations, companies, firms or persons engaged or interested in mercantile pursuits, such as merchants, bankers, shipowners and brokers or who are connected with agriculture, mining, manufactures, insurance, railways, commerce, art, science or literature shall be eligible to become Members of the Chamber. The subscription is Rs. 20 per month. Officials

Burma Marine Insurance Association,
Burma Fire Insurance Association,
Rangoon Import Association
 The Chamber elects representatives to the following Public Bodies —

Burma Legislative Council,
Rangoon Port Trust Board,
Rangoon Municipal Committee,
Victoria Memorial Park Trustees,
Pasteur Institute Committee,
Burma Boiler Commission

bers, the Chairman to be elected by ballot at the general meeting of January in each year, for a term of 12 months, and the Committee, with 2 supplementary members, at the general meetings of January and July in each year for the term of 6 months. The entrance fee for each member whose place of business is in Ceylon is Rs 50 and for each member whose place of business is elsewhere be Rs 25. A weekly slip of current rates of produce, freights, and exchange is drawn up by the Committee.

CEYLON.

The Ceylon Chamber of Commerce was incorporated in 1895 and has its head-quarters at Colombo. All firms and persons engaged in the general trade of Ceylon are admissible as members and every person or firm desirous of joining the Chamber must be proposed by one member, seconded by another and balloted for by the whole Chamber. The affairs of the Chamber are conducted by a Board of Directors consisting of Chairman and Vice-Chairman and from five to 10 members.

The following is the membership of this Committee at the present time —

Mr Wm. Moir (Lewis Brown & Co) (*Chairman*), Mr Jas Lochore (*Vice-Chairman*), Mr R. S. Philpott (P & O S N Co), Mr H. S. Jefferies, Mr W. G. Macvicar (Chartered Bank), Mr W. Phillips, Mr T. S. Clark, Mr W. Fraser, Mr C. S. Burns, Mr M. J. Cary

Secretary—Mr F. M. Simpson

* The Peoples of India

It is essential to bear in mind, when dealing with the people of India, that it is a continent rather than a country. Nowhere is the complex character of Indians more clearly exemplified than in the physical type of its inhabitants. No one would confuse the main types, such as Gurbhas, Pathans, Sikhs, Rajputs, Burmans, Nagas, Tamils, etc., nor does it take long to carry the differentiation much farther. The typical inhabitants of India—the Dravidians—differ altogether from those of Northern Asia, and more nearly resemble the tribes of Malaya, Sumatra and Madagascar. Whatever may be their origin, it is certain that they have settled in the country for countless ages and that their present physical characteristics have been evolved locally. They have been displaced in the North-West by successive hordes of invaders, including Aryans, Scythians, Pathans and Moghals, and in the North-East by Mongoloid tribes allied to those of Burma, which is India only in a modern political sense. Between these foreign elements and the pure Dravidians is borderland where the contiguous races have intermingled.

The people of the Indian Empire are divided by Sir Henry Risley (Caste, Tribe and Race, Indian Census Report, 1901, the Gazetteer of India, Ethnology and Caste Volume I, Chapter 6) into seven main physical types. There would be eight if the Andamanese were included, but this tiny group of Negrits may be disregarded. The Turkic-Iranian, represented by the Baluch, Branch and Afghans of Baluchistan and the North-West Frontier Province. Probably formed by a fusion of Turki and Persian elements, in which the former predominate. Stature above mean, complexion fair, eyes mostly dark, but occasionally grey, hair on face plentiful, head broad, nose moderately narrow, prominent, and very long. The feature in these people that strikes one most prominently is the proportions length of their noses, and it is probably this peculiarity that has given rise to the tradition of the Jewish origin of the Afghans.

The Indo-Aryan occupying the Punjab, Rajputana, and Kashmir, and having as its characteristics members the Rajputs, Khattris, and Jats. This type, which is readily distinguishable from the Turko-Iranian, approaches most closely to that ascribed to the traditional Aryan colonists of India. The stature is mostly tall, complexion fair, eyes dark, hair on face plentiful, head long, nose narrow, and prominent, but not specially long.

The Scytho-Dravidian, comprising the Laratha Brahmans, the Kunbis, and the Coorgs of Western India. Probably formed by a mixture of Iranian by a lower stature, a greater length of head, a higher nasal index, a shorter nose, and a lower orbito-nasal index. All of these characters, except perhaps the last, may be due to a varying degree of intermixture with the Dravidians. In the higher groups the amount of crossing seems to have been slight, in the lower the Dravidian elements are more pronounced.

The Aryo-Dravidian or Hindustani, found in the United Provinces, in parts of Rajputana, and in the lower the Dravidian elements are more pronounced.

It is essential to bear in mind, when dealing with the people of India, that it is a continent rather than a country. Nowhere is the complex character of Indians more clearly exemplified than in the physical type of its inhabitants. No one would confuse the main types, such as Gurbhas, Pathans, Sikhs, Rajputs, Burmans, Nagas, Tamils, etc., nor does it take long to carry the differentiation much farther. The typical inhabitants of India—the Dravidians—differ altogether from those of Northern Asia, and more nearly resemble the tribes of Malaya, Sumatra and Madagascar. Whatever may be their origin, it is certain that they have settled in the country for countless ages and that their present physical characteristics have been evolved locally. They have been displaced in the North-West by successive hordes of invaders, including Aryans, Scythians, Pathans and Moghals, and in the North-East by Mongoloid tribes allied to those of Burma, which is India only in a modern political sense. Between these foreign elements and the pure Dravidians is borderland where the contiguous races have intermingled.

The Mongolo-Dravidian, or Bengali type of Lower Bengal and Orissa, comprising the Bengali Brahmans and Khyasathas, the Mahomedans or Eastern Bengalis, and other groups peculiar to this part of India. Probably a blend of Dravidian and Mongoloid elements, with a strain of Indo-Aryan blood in the higher groups. The head is broad, complexion dark, hair on face usually plentiful, stature medium, nose medium, with a tendency to broad. This is one of the most distinctive types in India, and its members may be recognised at a glance throughout the wide area where their remarkable aptitude for clerical pursuits has procured them employment. Within its own habitat the type extends to the Himalayas on the north and to Assam on the east, and probably includes the bulk of the population of Orissa, the western limit coincides approximately with the hilly country of Chota Nagpur and Western Bengal.

The Mongoloid, type of the Himalayas, Nepal, Assam, and Burma, represented by the Kanaks of Lahuli and Kulu, the Lepchas of Darjeeling and Sikkim, the Limbus, Uraons and Gurungs of Nepal, the Bodos of Assam, and the Burmese. The head is broad, complexion dark, with a yellow tinge, hair on face scanty, stature short or below average, nose often to broad, face characteristically flat, eyelids often cbligne.

The Dravidian type extending from Ceylon to the valley of the Ganges, and pervading Malabar, Hyderabad, the Central Provinces, most of Central India and Chota Nagpur. Its most characteristic representatives are the Ranyans of Malabar and the Santals of Chota Nagpur. Probably the original type of the population of India, now modified to a varying extent by the admixture of Aryan, Scythian, and Mongoloid elements. In typical specimens the stature is short or below mean, the complexion very dark, approaching black, hair plentiful, with an occasional tendency to curl, eyes dark, head long, nose very broad, sometimes depressed at the root, but not so as to make the face appear

* The material in this section is almost entirely taken from the Report on the Census of India, 1911, by Mr. E. A. Galt, C.S.I., C.I.D., I.C.S., Fellow of the Royal Statistical Society

regular, but it is supplemented in many parts by water from the canals. The natural divisions which contain the coarse districts of Orissa and north Malabar, with a rainfall of 60 inches, has a relatively low mean density, but this is because it includes on the west a considerable hilly area, while on the east near the sea the ground is intermediate strip, between the littoral and the hills, the density is as great as in parts of the lower Gangetic Plain. Want of water is the main explanation of the comparatively sparse population in several more or less level tracts such as Gujarat, Rajputana East and Central India West, and the North-West dry area. In Assam there are extensive tracts of hill and jungle and sandy stretches in the strath of the Brahmaputra River, where permanent cultivation is out of question. The agricultural returns show that three quarters of the whole area is cultivable but this simply means that crops of some kind can occasionally be grown. The proportion of the area fit for permanent cultivation must be less than half that shown in the returns.

TOWNS AND VILLAGES.

for town life than the lower, but the disproportionate is gradually disappearing, modern industrial developments are attracting the lower castes to towns in ever-increasing numbers.

Urban and Rural—The proportion of the urban to the total population has fallen during the decade from 9.9 to 9.5 per cent. The main explanation of this is undoubtedly the fact that plague has been far more prevalent in towns than in rural areas. This scourge has now spread to all parts of the Empire except the east and south. At the time of the census an epidemic was raging in many towns, especially in those of the United Provinces, Central India and the Central Provinces and Berar, and a large number of the regular inhabitants had gone away. In addition, however, to driving people away, plague has been responsible in many towns for a terribly heavy mortality. It is impossible to make any estimate of the direct and indirect effects of plague on the growth of towns, but it is quite certain that they have been enormous.

Urban Tendencies—We cannot draw any conclusions as to the tendency to urban agglomeration from a comparison of the statistics of the present census with those of the previous one, when plague was still a new and more or less local visitation, but there can be no doubt that there is a growing tendency for people to congregate in towns of a certain kind. The introduction of machinery is rapidly causing the old cottage industries to be replaced by mills and factories and these are necessarily located at those places where there are the best facilities for collecting the raw material and distributing the manufactured article. The jute industry is practically confined to the banks of the Hooghly near the port of Calcutta. Cotton mills are found chiefly in Western India and woolen and leather factories at Cawnpore and Delhi. The increase in railway communications also encourages the growth of towns. Not only are the great sea-ports attracting an ever-growing population, but various inland towns are benefiting from the same cause. The extent to which modern communications of trade and industry are causing the growth of towns is obscured not only by plague, which is generally far more prevalent in towns than in rural areas, but also by the decay of old centres of population, which owed their importance to past political and economic conditions. Throughout India there are many former capitals of great dynasties whose population is steadily dwindling. During the last ten years, Alaudpur, the last capital of the kings of Ava, has lost a quarter of its population.

Sex in Towns—In respect of the distribution by sex, the urban population in India presents a striking contrast to that of European countries. In Europe the proportion of females is larger in towns than in the general population, but in India it is considerably smaller, and the number of females per thousand males is only 847, compared with 953 in the population as a whole. The reason is that in this country the great majority of the domestic servants, shop hands and factory employes are males. The disproportion is most marked in large trading and industrial centres where the number of immigrant females per thousand males is only 357. Females per thousand males

Religion in Towns—Of the Parsis no fewer than six out of every seven are resident in towns, and of the Christians more than one fifth. There is a marked contrast between these proportions and those for Hindus and Mohammedans who form the bulk of the population. Of the Mohammedans less than one eighth, and of the Hindus less than one eleventh, reside in towns. In the case of the former the proportion rises to one sixth if we exclude the figures for Bengal, where the majority of the Mohammedans are the descendants of local converts. Amongst the Hindus the higher castes have hitherto shown a greater predilection

GROWTH OF THE INDIAN POPULATION

	1911	1901	1891	1881	1872
INDIA	315,100,300	291,391,000	287,314,071	253,800,100	206,162,000
PROVINCES	214,207,612	231,005,040	221,210,630	107,882,817	186,101,105
Ajmer-Merwara	501,306	470,012	542,358	100,722	300,331
Andamans and Nicobars	20,160	24,040	15,000	11,028	
Assam	6,719,635	6,841,878	5,477,302	4,907,702	4,150,760
Bihar	414,412	382,100			
Bombay	45,483,077	42,141,177	30,080,032	30,010,728	34,119,405
Bihar and Orissa	34,400,064	33,242,783	32,870,557	30,068,320	29,480,482
Bihar	23,752,000	23,360,212	23,581,538	22,418,367	19,736,027
Orissa	5,131,753	4,082,142	4,066,227	4,343,004	3,003,156
Chota Nagpur	5,005,302	4,900,420	4,028,702	4,225,080	3,107,000
Bombay (Presidency)	19,072,042	18,550,650	18,878,471	16,464,588	19,301,302
Bombay	16,113,042	15,304,700	15,050,202	14,042,021	14,076,808
Sind	3,513,435	3,210,910	2,875,100	2,875,100	2,200,505
Aden	46,165	43,074	44,079	34,860	19,280
Hurma	12,115,217	10,400,024	7,722,058	3,730,771	2,747,118
Central Provinces and Berar	13,010,308	11,971,452	13,048,972	11,043,303	9,051,268
Central Provinces	10,850,140	9,217,436	10,161,481	9,270,000	7,723,014
Berar	3,057,162	2,754,016	2,887,491	2,072,073	2,227,054
Coorg	174,076	180,007	173,055	178,302	168,312
Madras	41,406,404	38,220,054	37,044,428	30,811,154	31,230,022
North-West Frontier Province (Districts and Administered Territories)	2,100,033	2,041,534	1,857,510	1,575,043	17,000,072
Punjab	19,074,056	20,330,337	19,000,308	17,274,597	17,000,072
United Provinces of Agra and Oudh	47,182,044	47,692,277	46,003,512	44,140,050	42,002,004
Agra	34,024,040	34,850,100	34,254,588	32,752,127	30,780,061
Oudh	12,558,004	12,833,108	12,050,024	11,387,832	11,221,043

CITIES.

percent. The falling off is due largely to the growing tendency of the inhabitants to own their home in the suburbs or even further afield. The suburban municipalities have grown during the decade by 43 per cent.

[illegible][illegible]

mainly by immigrants, and more than 80 per cent of its inhabitants were born elsewhere. Most of them come from the neighbouring districts, more than one-fourth of the total number are from Rangoon, while four of the other districts together supply more than a third. There are 30,000 Goanese, most of whom are in domestic service. Of the immigrants from outside the province, some 50,000, chiefly mill hands, are from the United Provinces, and 12,000 mainly shopkeepers, from Rajputana. Of the immigrants from outside India the largest number (6,000) come from the United Kingdom.

Madras—Unlike Calcutta and Bombay, Madras, which is handicapped by its distance from the coast-lands, has but few large industries. The indigenous handicrafts are decaying and their place is not being taken by factories of the modern type. Apart from its being the headquarters of the Local Government, Madras owes whatever importance it possesses to its position as a distributing centre. Of its total population (518,660), only one-third are immigrants, and of these only 12 per cent have come from places beyond the limits of the Madras Presidency. The great majority are natives of the four districts in the immediate vicinity of the city.

The population grew fairly rapidly during the twenty years prior to 1901, but since then it has been almost stationary. There has been an increase of about one per cent in the number of persons born in the city, but fewer of them

GROWTH OF THE INDIAN POPULATION—*contd*

	1911	1901	1901	1891	1872
STATES AND TERRITORIES					
Assam State (Manipur)	70,886,861	62,765,116	60,073,835	55,013,511	20,009,025
Baluchistan States	310,222	281,165		221,070	
Baroda State	120,291	128,610			
Bengal States	2,032,708	1,052,002	2,415,306	2,182,158	1,907,508
Bihar and Orissa States	822,665	710,200	716,310	608,261	567,827
Bombay States	3,045,200	3,314,474	3,028,018	2,410,611	1,723,000
Central India Agency	7,411,076	6,008,550	8,081,050	6,637,893	6,767,970
Central India Agency	9,356,980	8,107,805	10,136,403	9,261,907	
Central Provinces States	2,117,002	1,631,140	1,712,562	1,387,294	928,116
Coastal State	13,374,076	11,141,142	11,337,010	9,845,501	
Madras States	3,168,126	2,005,578	2,543,052		
Madras States	4,811,811	4,188,086	3,700,622	3,341,840	3,280,302
Mysore State	6,800,103	6,539,300	4,943,004	4,186,188	6,655,402
N W P Province (Agency and Tribal areas)	1,022,004	83,962			
Punjab States	4,212,794	4,424,308	4,263,280	3,661,688	
Rajputana Agency	10,630,432	9,853,366	12,171,740	9,634,255	
Sikhim State	87,020	69,014	30,458		
United Provinces States	832,036	802,007	792,401	741,750	638,720

have been enumerated within the city limits as compared with 1901 the net gain due to migration is less than 9,000. It is possible that the great demand for labour in Burma, where wages are very high, has attracted many of the labouring classes who would otherwise have sought their living in Madras.

HOUSES AND FAMILIES.

Generally speaking it may be said that the labouring classes in India live in one, or at the most two, single room but. The home of a well-to-do peasant consists of a public sitting room and a cook room and several apartments which are arranged round and open on to a courtyard in spite of the joint family system the number of houses corresponds very closely to the number of families in the European sense. The total number of houses is 68.7 million, and there are 64.6 million married females aged 15 and over. Except amongst the higher castes who

According to the census returns, the total population of India has increased by 7.1 per cent during the last decade, and by 52.9 per cent since 1872, but the real gain since the latter date is very much less than this. Large tracts of country, including the Central India and Rajputana Agencies, Hyderabad and the Punjab States, which were omitted from the census returns of 1872, were included in those of 1881. In 1891 the greater part of Upper Burma and the greater part of Baluchistan. In 1911 the Agencies and tribal areas in the North-West Frontier Province, together with a few smaller areas, were included within the scope of the enumeration. The real increase in the population in the last 38 years is estimated at about 50 millions, or 19 per cent. This is less than half the increase which has taken place in the same period amongst the European nations of Europe, but it considerably exceeds that of the Latin nations. In France the population has grown by less than 7 per cent since 1870, but this is because of its exceptionally low birth-rate. In India the birth-rate is far higher than in any European country, and it is the heavy mortality especially amongst infants, which checks the rate of increase.

Famine and Disease—In addition to the causes which ordinarily govern the movement of the population, India is subject to two special factors—namely and epidemic disease. The decade preceding the census of 1911 was free from widespread famines such as those of the preceding ten years. In 1907 there was a partial failure of the monsoon which was felt over a wide area, extending from Bihar to the Punjab and Bombay, and causing actual famine in the United Provinces and in a few districts elsewhere. Prices ruled high in most years and there was an extension of special crops, such as jute and cotton, which are more profitable to the cultivator than food grains. It was on the whole a period of moderate agricultural prosperity. From the point of view of public health, the general period would have been an average one, but for the ravages of plague. Breaking out in

Lower Burma has grown by 135 per cent since 1872 and the whole Province including Upper Burma, which was annexed in 1886, by 87 per cent. In Assam including Manipur the increase since 1872 amounts to 70 and in the Central Provinces and Berar to 47 per cent. The other main provinces the rate of growth has been much slower. In some provinces, such as Burma, Assam and Bengal there has been continuous progress but others, at some time or another, have sustained a set-back. In the latter provinces at least, the internal variations are also frequently considerable. In Bengal one district has at the present time a smaller population than it had in 1872, while four others have more than doubled their population since that date. In British territory there has been a gain of 1 per cent over about nine-tenths of the area, 9.5 instead of 7.1 per cent.

MOVEMENT OF THE POPULATION.

1881	1891	1901	1911
5.8	5.4	5.2	4.9

Average population per house

room, not the house
the unit for all below the middle class is the the towns and cities, owing to the high rents, there is often a strong disruptive tendency. In as is frequently supposed. Where it is in vogue, the joint family system is not nearly so common as it was in 1901. The mortality from 1901 to 1911 it exceeded half a million. The total number of deaths from plague during the decade was nearly 6.5 millions or which over one-third occurred in the Punjab and two-fifths in the United Provinces and Bombay, taken together itself in Bengal, Assam, and on the East Coast. This however is only the recorded mortality, in time of epidemic the reporting agency breaks down and large numbers of deaths escape registration. Plague attacks women more than men, and people in the prime of life more than the young and old. If plague is omitted, and it is assumed that the mortality of the decade would otherwise have remained normal, the population of the census of 1911 would have been greater than it was by at least 6.5 millions. In other words, the population would have increased by

General Conclusions—The most noticeable feature is the continuous rapid growth in Burma. Lower Burma has grown by 135 per cent since 1872 and the whole Province including Upper Burma, which was annexed in 1886, by 87 per cent. In Assam including Manipur the increase since 1872 amounts to 70 and in the Central Provinces and Berar to 47 per cent. The other main provinces the rate of growth has been much slower. In some provinces, such as Burma, Assam and Bengal there has been continuous progress but others, at some time or another, have sustained a set-back. In the latter provinces at least, the internal variations are also frequently considerable. In Bengal one district has at the present time a smaller population than it had in 1872, while four others have more than doubled their population since that date. In British territory there has been a gain of 1 per cent over about nine-tenths of the area, 9.5 instead of 7.1 per cent.

MIGRATION.

with three quarters of the total population, and a loss of 5·3 per cent in the remaining one-fourth of the area and one-fourth of the population. The contrast in different parts of the Native States is still more striking. The net increase of 10·3 per cent is the outcome of a gain of 1·4 per cent in four-fifths of the total area and population, coupled with a loss of 6·2 per cent elsewhere. The relatively greater net increase in the Native States as compared with British territory is explained by the fact that many of the States suffered severely from famine in the previous decade when they sustained a net loss of 5 per cent, while British territory gained 1·7 million and a density of 312 to the square mile.

In India there are two currents of migration—minor and major. The chief of the minor movement is the custom, almost universal amongst Hindus, whereby parents seek wives for their sons in a different village from their own. Of the 26·5 million natives of India who were enumerated in a district other than that in which they were born, 16·5 millions, or 62 per cent were born in a district adjoining that in which they were enumerated. The major currents of migration are governed by economic conditions. The most noticeable movements are the large streams of emigration from Bihar and Orissa, Madras, the United Provinces and Rajasthan, and of immigration into Bengal, Assam and Burma. Owing to its fertile soil, Bengal is able to support practically the whole of its dense indigenous population by agriculture. It is necessary therefore to man the jute mills by imported labour, as also the tea gardens of Darjiling and Jalpaiguri and to draw the general labour supply from outside. In Bengal the net excess of immigrants over emigrants is close on 1,400,000. Of these about 236,000 are Natives of a district in Bihar and Orissa, or Assam, contiguous to the Bengal district in which they were enumerated. Assam and Burma are sparsely populated and the land available for cultivation being ample, very few of the indigenous inhabitants find it necessary to work for hire. The tea gardens of Assam and the rice mills and oil wells of Burma have to obtain their coolies elsewhere. In Assam 12·5 per cent and in Burma 5 per cent of the population are immigrants. On an average 51,000 labourers and dependants go each year to the tea gardens of Assam. In Burma, Madras supplies labourers for the rice-milling, oil and other industries, whilst many coolies flock into the province from Chittagong, chiefly for the rice harvest. The net loss to Bihar and Orissa on account of migration is about 1·5 millions. The United Provinces sustain a net loss of about 800,000 from migration, chiefly in the direction of Bengal. Madras being very backward from an industrial point of view, there is no great local demand for labour. At the same time there is an exceptionally large population of the 'untouchable' castes, who have no scruples about seeking their livelihood overseas. It provides Ceylon with labour for its plantations, Federated Malay States with labour for their rubber plantations. The enterprising Marwari traders of Rajasthan have penetrated to all parts of India and are to be found in very important bazars throughout Bengal and even in Assam. Bombay is industrially more advanced than Bengal, but as its soil is less productive than the country on its borders. There is probably very little movement from Burma into China.

Emigration from India—The Indian census statistics naturally tell us nothing of the migration from India to other countries. This emigration is of two kinds, the movement across the border which separates India from contiguous countries, such as China, Nepal, Afghanistan and Persia, much of which is of the casual type, and emigration to distant countries. No statistics are available regarding the emigration from India to the countries on its borders. There is probably very little movement from Burma into China.

Non-Asiatic Immigration—The total number of immigrants from countries outside Asia is 146,205. Of these 131,668 come from Europe. The United Kingdom sends 122,910, Germany comes next with only 1,860 and then France with 1,478. As compared with 1901 there is an increase of about 26,000 in the number of immigrants from the United Kingdom. Of the British-born 77,626 were serving in the army as compared with 60,965 at the time of the previous census, when a strong contingent had been sent from India to reinforce the British garrison in South Africa. The rest of the increase is accounted for by the industrial development which has taken place, the season of railways, and the growing extent to which Englishmen in India marry. The number of females born in the British Islands and enumerated in India in 1914 is 19,194. The figures for other European countries do not call for any special comment.

Asiatic Immigration—Of the 504,000 persons born in other Asiatic countries who were resident in India at the time of the census, more than half were natives of Nepal. Of the 92,000 immigrants from Afghanistan all but 11,000 were enumerated in Northern India. The rest were cold weather visitors who travel about the country peddling piece-goods and other articles of clothing. These Gadhui pedlars cause great trouble in Bengal by their truculence. The number of Chinese is 50,000. Most of these are found in Burma, but the Chinaman is making his way into Bengal, where he is appreciated as a shoemaker and carpenter. From Arabia come 23,000 immigrants, chiefly to Bombay.

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who came from beyond the sea were looked upon as beings of a different class. They were treated hospitably, and in course of time they assimilated much of the influences of their Hindu environment. But they remained all the same separate communities, and no attempt was made to incorporate them in the great mass of Hindunism. The prohibition of sea voyage to members of the higher castes is another proof of the peculiar prejudice which ancient Indians cherished against inhabitants of countries divided from India by intervening seas.

Origin of Hindunism—We have spoken alone of Hindunism as being autochthonous

The opinion generally held is that the ancestors of the Vedic Indians were immigrants from Central Asia. An Indian scholar of some repute has recently endeavored to show that the received opinion is not borne out by the evidence available in the ancient literatures of India. Whatever may be the value attaching to his contention that the Vedic Indians were not immigrants or descendants of immigrants, but only a section of the indigenous population added to the cult of the-worship, it is true, as he says, that there is no expression in the Vedas of a foreign homeland, such as one might expect to find in the literature of an immigrant race. This is all the more remarkable as an intense attachment to the land they lived in is manifest in all their compositions. A Sanskrit couplet in which the names of the seven great rivers of India, the Ganges, the Jumna the Godavari, the Saraswati, the Nerbudda, the Indus and the Canvery, are strung together in pious praise, is recited daily by millions of Hindus at their daily devotions, and helps to keep them in mind of the sanctity of the Indian Continent in Hindu eyes. If the ancient Hindus were immigrants, they not only took care to blot out all memories of the land from which they came from their own minds, but they also strove by every means in their power to bind the reverence and love of their posterity to India as the land *par excellence* of religion and morality, so much so that the name Hindu, in the orthodox acceptance of the term, is not applicable to anyone who is not born in India. If the ancestors of the Hindus were foreigners in India, they must have set themselves, as a matter of deliberate policy, to interfere with the deepest affections and the highest aspirations of their race with the land in which they had settled, for the entire exclusion of the land whence they had come

Evolution of Hindunism—Following from the theory that the ancestors of the Hindus were immigrants from Central Asia, is the explanation generally given of the varieties of religious beliefs and social practices to be found within the pale of Hindunism, it is the common idea, was originally a pure and simple creed which has had to compromise and simplify of the population, amongst whom it spread, by accepting several of its superstitions. The greatest obstacle in the way of this explanation is that there is no widespread acknowledgment amongst missionaries that amongst the Hindus at any time the immense distances and the absence of means of communication would

And yet, though Hindunism refuses to conform to almost every one of the ideas which we usually associate with the term "religion," it is impossible to deny that it occupies a unique and highly important place amongst the religious systems of the world. The reason why it does not fit into our definition of religion is that it represents a combination of evolution and of revolution in the history of religion.

Moreover, a comparatively implicit selection and entrusted with the duty of selection. As a fact, however, we find that Hindunism has exercised very little selection, and that it covers practically all the beliefs and customs which prevail amongst the tribes who are included within its pale. Such a state of things is more consonant with the view that the pure forms of Hindunism are highly evolved stages of the cruder forms which are still observed by the less educated and prosperous sections of the community. This view, namely that the higher forms of Hindunism are evolved from lower ones, rather than that the latter are corruptions of the former, gains support from what is now generally accepted as being the true explanation of the origin of certain social customs. Twenty years ago, it was generally held that the custom of child marriage, for instance, was of sacerdotal origin and was most largely prevalent amongst the higher castes than amongst the higher castes, and that amongst the latter, it is a survival from the times when the caste system was less rigid and intermarriages, that is to say, the taking of wives by the higher castes from the lower, were common. It may be added that the two most characteristic beliefs of Hindunism, namely, that in the transmigration of souls and in the law of *Karma* or retribution, are held with, if anything, more tenacity by the lower than by the higher castes.

Scope of Hindunism—From this point of view, the varying beliefs and customs which go under the name of Hindunism not only offer no difficulties, but furnish the right clue to the understanding of this unique socio-religious system. They explain why the term "religion," as applied to Hindunism does not adequately express its scope and method. Hindunism has no settled creeds which are obligatory on every Hindu. It enforces no fixed and uniform moral standards on the innumerable sects and castes which bear its name. It extends its influences to monogamous, polygamous, and even polyandrous unions, between the sexes and, in the case of the so-called *devadassas*, countenances a life of open irregularity. An Indian newspaper recently insisted on an interesting discussion on the question "Who is a Hindu?" An eminent Hindu lawyer, who subsequently rose to be a judge of one of the Indian High Courts, laid down that a Hindu was one to whom the Indian Courts would apply the Hindu law. The learned lawyer, however, forgot that there are Mohammedan castes which follow the Hindu law in regard to the inheritance of and succession to property.

And yet, though Hindunism refuses to conform to almost every one of the ideas which we usually associate with the term "religion," it is impossible to deny that it occupies a unique and highly important place amongst the religious systems of the world. The reason why it does not fit into our definition of religion is that it represents a combination of evolution and of revolution in the history of religion.

Religion	India	British Provinces	Native States
Hindu	315,156,296	244,267,542	70,888,854
Brahmanic	217,586,802	163,621,431	53,965,461
Mysa	217,137,943	163,381,330	53,956,563
Brahmo	5,504	5,210	294
Sikh	2,014,466	2,171,508	842,558
Jain	1,248,182	458,578	780,604
Buddhist	10,721,453	10,644,409	77,044
Zoroastrian (Parsi)	100,096	86,155	13,941
Muslim	66,647,299	57,433,889	9,223,410
Christian	3,876,203	2,492,284	1,383,919
Jew	20,980	18,524	2,456
Animistic Religions and Religion not returned	37,101	7,348,024	2,947,144
Not enumerated by Religion	1,008,556	2,340	1,608,556

Religions	Males		
	Total Population	Illiterate	Literate
Literate in English			

Millions	Total Population	Illiterate	Literate	Literate in English
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Males

Hindu
Sikh
Jain
Buddhist
Parsi
• Muhammadan
Christian
Animistic
Unnot and Unspecified

Total Females

Total Population

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thought. In other races the line of evolution was from polytheism to monotheism, but in India it was from polytheism to the higher pantheism. Contrasting the development of the Judean idea of God with that of the Hindus, Dr Harold Harding observes: "With the Hindus there was no God who claimed sole sway, they went back to the power which makes all gods what they are, to the inner aspirations and needs which find vent for themselves in prayer and sacrifice. Following an extremely remarkable line of thought that which drives men to worship gods was itself regarded as the true divine power. Brahman meant originally the magical, creative word of prayer, but it afterwards came to denote the principle of existence itself, so that we have a transition from the idea of motion towards to that of its goal, from prayer to the object addressed in prayer." The Indian philosopher saw the whole universe transmuted and overspread with Deity. He perceived how evil was being perpetually transmuted to good in the cosmic process spreading out before the poet and the philosopher, endless and timeless, to whom the evil and the good seemed but different stages in a great common process of which the secret was known only to the Supreme Being. No European writer has caught the innermost essence of the Hindu philosopher's idea of the Supreme, so faithfully, and expressed it so felicitously as Sir Edwin Arnold in his "Light of Asia".

Before beginning, and without an end, As space eternal and as surety sure, Is fixed a Power divine which moves to Only its laws endure. It is not marred nor stayed in any use, All like it, the sweet white milk it brings To mothers' breasts, it brings the white drops too, Where with the young snake stings. It slayeth and it saveth, nowise moved Except unto the working out of doom, Its threats are Love and Life, Death and Pain.

The shuffles of its loom It maketh and unmaketh including all, What it hath wrought is better than had been, Slow grows the splendid pattern that it plans.

Its wistful hands between The ethical values of Hinduism are not different from those of other great religions. Like them it attaches little importance to the qualities which make for worldly success, and most importantly to self-sacrifice, humility and kindness to all. Only its methods differ. On the whole, however, the Hindu socio-religious scheme, owing to its tendency to make the individual human being a passive instrument in the hands of a Higher Power instead of an active co-operator with it, has favoured stability at the expense of progress.

Hindu sects—Hinduism is made up of many sects and cults. It is usual to speak of Hinduism as it was before Buddhism, as a single creed, but this is because the literature that has come down to us is the literature of the sect that came to supersede all others.

Hinduism—The Hindus number 217,586,892 or 69.4 per cent of the total population of Hindustan. The Hindus are not different in their lines, discover the existence of rival sects probably of one of several sects which happened to be gifted with a talent for letters. The rapid multiplication of sects, however, was undoubtedly encouraged by the introduction of idol worship in imitation of the practice of decadent Buddhism. Hindu religious philosophers recognised three ways of salvation, namely, the way of knowledge, the way of faith and the way of service. Every sect of Hinduism recognises the value of all these three ways, but it differs as to the relative importance to be attached to each. The sect of the great philosopher, Sankaracharya, who maintained that the Supreme Being was the only Reality and that all the phenomenal universe was Maya or illusion, and that salvation came from the realisation of this fact, did not discard faith and service altogether, but only gave these a subordinate position in his scheme of religion. Ramanuja, Aladhara and Vallabhacharya who followed him and, in more or less degree, refuted his doctrine, laid more stress on faith and service than on knowledge, but they did not discard the path of knowledge altogether. It should be mentioned here that it has been the great misfortune of Hinduism that the path of service has come to mean the path not of altruistic service to mankind but the path of service conceived in a ceremonial sense to priests, religious recluses and mendicants and to idols. It is the great aim of the modern religious reform movements in Western India, the great mass of the Hindus in Southern and to a much smaller extent in Northern India, to rescue the path of service from this spurious interpretation and to make altruistic social service an integral part of religion. The question of sect, however, does not play a very important part in Hinduism. Except in Southern and to a much smaller extent in Northern India, the great mass of the Hindus are not sectaries. In Southern India, the Madras Presidency, and in Mysore, and they in the Karnataka districts of the Bombay and him. The Lingayaths are a Shiva sect round worship Shiva or visit a temple dedicated to Vishnu. But these are exceptional instances. But so far as the bulk of the Hindus are concerned, they resort to the nearest shrine whether it be dedicated to Shiva or Vishnu. The attitude of Hinduism to other religions is that they are each of them the most suitable path to salvation for the people who are born in them—that they are all several roads which lead to Heaven. For this reason Hinduism has never been a proselytising religion. This has proved a disadvantage to it face to face with such religions as Mohammedanism and Christianity which not only admit converts, but are actively engaged in seeking them. The proportion of Hindus to the total population has steadily diminished during the last forty years, partly owing to conversions to other religions particularly from amongst the lower classes. Conversions from among members of the higher and literate classes have practically ceased.

OCCUPATIONS OF THE INDIAN PEOPLES

INDIA	
I—PRODUCTION OF RAW MATERIALS	227,030,002
I—Exploitation of the Surface of the Earth	226,550,483
Pasture and agriculture	224,693,900
(a) Ornamental cultivation	216,787,137
(b) Growing of special products and market gardening	2,012,503
(c) Forestry	672,093
(d) Raising of farm stock	5,176,104
(e) Raising of small animals	48,063
Fishing and hunting	1,854,583
II—Extraction of Minerals	79,609
Mineral	373,927
Quarries of hard rocks	73,424
Salt, etc.	73,258
3—PREPARATION AND SCRAP OF MATERIAL SUBSTANCES	58,191,121
III—Industry	35,323,041
Leather	8,306,501
Hides—skins and hard materials from the animal kingdom	698,741
Wood	3,799,892
Metals	1,661,445
Ceramics	2,240,210
Chemical products properly so called, and analogous	1,241,587
Industries of dress and the toilet	3,711,673
Furniture industries	7,750,609
Building industries	39,268
Construction of means of transport	2,062,493
Production and transmission of physical forces (heat, light, electrical, motive power, etc.)	66,056
Industries of luxury and those pertaining to literature and to arts and sciences	14,384
Industries concerned with reuse matter	2,141,665
IV—Transport	1,388,515
Transport by water	5,023,900
Transport by road	982,760
Transport by rail	7,781,038
Post Office, telegraph and telephone services	1,062,493
P—Trade	201,781
Banks, establishments of credit, exchange and insurance	17,839,102
Brokers, commission and export	1,220,187
Trade in textiles	240,853
Trade in skins, leather and furs	1,277,469
Trade in wood	296,712
Trade in metals	224,333
Trade in pottery	59,766
Trade in chemical products	101,981
Hotels, cafes, restaurants, etc.	171,927
Other trade in food stuffs	719,052
Trade in clothing and toilet articles	9,478,868
Trade in furniture	306,701
	173,413

OCCUPATIONS OF THE INDIAN PEOPLES—*cont.*

Trade in building materials	51.61
Trade in means of transport	51.06
Trade in fuel	521.97
Trade in articles of luxury and those pertaining to letters and the arts and sciences	522.10
Trade in refuse matter	3.05
Trade in other sorts	2,194.54
C—PUBLIC ADMINISTRATIONS AND LIBERAL ARTS	10,912.12
VI—Public Force	2,093.56
Army	667,275
Navy	4,649
Police	1,778,638
VII—Public Administration	2,618.60
VIII—Professions and Liberal Arts	5,925.37
Religion	2,763,439
Law	202,168
Medicine	67,844
Education	671
Letters and arts and sciences	951,167
IX—Persons living principally on their Income	510.17
D—Miscellaneous	17,250.58
X—Domestic Service	1,093,180
XI—Insufficiently described Occupations	2,211.71
XII—Unproductive	521.81
Inmates of jails, asylums and hospitals	1,000
Leggery, vagrants and prostitutes	18,551

DISTRIBUTION OF THE POPULATION

India

British

Two main and several minor sects are the Shiah and the Sunni. The great majority of Indian Mussulmans are of the latter sect. The Punjab and Sind in the North-West and East Bengal in the North-East are the strongholds of Islam in India. The Mussulman population of India, according to the Census of 1911, is 66,647,299. Of this number 12 millions in the Punjab, and about 5 millions in the United Provinces amongst Native states, Kashmir has the largest Mussulman population, about 2½ millions.

Christianity—Indian Christianity has an even longer history than Indian Mohammedanism. According to the tradition prevailing among the Syrian Christians in Malabar, the introduction of Christianity and the establishment of the Original Church in Malabar in the year 52 A.D. are ascribed to the Apostle St Thomas, who landed at Cranganore or Muziris, converted many Brahmins and others, ordained two Presbyters, and also founded seven churches, six in Travancore and Cochin, and the seventh in South Malabar (Cochin Castes and Tribes, Vol II, Chapter XVI, p. 435). The history of Roman Catholicism in India dates from the beginning of the sixteenth century. The first Protestant mission was established two centuries later by the Lutherans who started their work in Tranquebar in South India under Danish protection. The Christian population, according to the last Census, numbers 3,876,203. Nearly 2½ millions are inhabitants of the Madras Presidency and the Native States connected with it. Bihar and Bombay have each over 200,000 Christians.

Uniformity of Indian Social Life—Through India is a land of many religions and though each religious community has, as a rule, lived apart from the other communities for centuries, still there is a considerable uniformity in the arrangements and institutions of their social life. The social system of the Hindus is the type to which all other communities domiciled in the country have hitherto tended to conform. To a large extent, this uniformity of social arrangements is clearly due to the fact that, amongst the Mahomedans and Indian Christians, for instance, the converts from Hinduism continued to retain their old ideas in regard to social conduct. To a smaller extent, the motive which influenced them to conform to Hindu social ideal has been the convenience thereby caused in business intercourse with their Hindu neighbours.

SOCIAL INSTITUTIONS

in his article on the Religions of India in the *Imperial Gazetteer* "that in the Avesta the evil spirits are known as *Dævas* (modern Persian *Dev*), a term which the Indo-Aryans applied, in the form *Dēva*, to the spirits of light. By a similar inversion, *Ashura*, the name of the gods in the *Rig Veda*, underwent degradation and at a later date was applied to evil spirits, but in Iran, *Ashura* was consistently applied to the higher sense to the deity, especially as *Alura Mazd*, the wise, to the Supreme God." The Parsis have two sects. The principal difference between them appears to be that the holy days of the one precede those of the other by about a month. The number of Parsis according to the last Census, is 100,096. The majority of the Parsis live in Bombay.

Jews—The Beni-Israel at Kolaba, in Bombay and the Jews at Cochin are descendants of ancient Colonies. The Kolaba Colony dates back to the sixth century, and the Cochin Jewish colonies recognize a white and black section, the latter being those who have more completely coalesced with the native population. The Jews numbered 20,980 at the Census of 1911.

Animists—Since the Census of 1891, an attempt has been made to enumerate the "Animists," separately from the Hindus. 10,205,168 persons are classed as Animists, according to the last Census. The difference between Animism and Anthropomorphism has been stated by Professor Westermarck, to be that, while the animist worships inanimate objects as gods, Anthropomorphism consists in the worship of such objects as representatives and reflection of the Deity. As a subtle distinction of this kind is not within the grasp of the average enumerator, the category of Animists in the Census schedules is largely conjectural. Mr Crooke in the *Imperial Gazetteer* observes "Such a classification is of no practical value, simply because it ignores the fact that the fundamental religion of the majority of the people—Hindu, Buddhist, or even Christianity—is mainly Animistic. The gods, but where trouble comes in the shape of disease, drought, or famine, it is from the older gods that he seeks relief."

Thus, we find, there is scarcely any community in India which has not been more or less infected by the caste spirit. The Jews, the Parsis, the Christians, and even the Mahomedans have been influenced by it. Other Hindu social institutions and customs which have exerted a similar influence are the joint family system, the custom of child marriages, and of enforced widowhood, and the feeling that contact with persons engaged in certain occupations is polluting. In view of this general similarity of the social institutions of the several Indian communities, a description of the Hindu social system which is the great prototype of them all, will give a general idea of the social life of the Indian population as a whole. It is of the Indian population as a whole that we have been treating in recent years, as the result of a growing should, however, be mentioned here that, in the Hindu social ideal has been the convenience thereby caused in business intercourse with their Hindu neighbours.

SEX

In India as a whole the proportion of females per thousand steadily rose from 954 in 1881 to 963 in 1901. It has now fallen again to exactly the same figure as in 1881. The important aspect of these figures is the great contrast they show between India and Europe, where the number of females per thousand males varies from 1,093 in Portugal, and 1,065 in England and Wales, to 1,013 in Belgium, and 1,003 in Ireland. In drawing attention to this disparity the Chief Census Officer argued that the relatively high mortality amongst females was insufficient to account for the difference stated. Then in summarising the causes of this relatively higher mortality he said, "In Europe, boys and girls are equally well cared for. Consequently, as boys are constitutionally more delicate than girls, by the time adolescence is reached, the female population has already obliterated the excess and produced numerical equality between the two sexes. Later on in life, the mortality amongst males remains relatively high, owing to the risks to which they are exposed in their daily occupations, hard work, exposures and accidents of various kinds combined to make their mean duration of life less than that of women, who are for the most part engaged in domestic duties or occupations of a lighter nature. Hence the proportion of females steadily rises in India, the conditions are altogether different. Sons are earnestly longed for, while daughters are not wanted. Thus feeling exists everywhere, but it

yields greatly in intensity. It is strongest amongst communities such as the higher Khaps clans, where large sums have to be paid to obtain a husband for suitable status and the cost of a marriage ceremony is excessive and those like the Pathans who despise women and hold in de-
rision the father of daughters. Sometimes the prejudice against daughters is so strong that the birth of a girl. Formerly female infants were even now they are very commonly neglected to the detriment of her health. The daughter which the nature gives to girls is thus neutralised by the treatment accorded to them by their parents. To make matters worse, they are given in mar-riage at a very early age, and cohabitation begins long before they are physically fit for it. To the evil of early child-bearing must be added unsuitable midwifery," and the combined result is an excessive mortality amongst young mothers. In India almost every woman has to support a family, and she forms the bulk of the population, the men, and they are sometimes under the necessity to work as hard as and thus less favourably situated in respect of their occupations than their sisters in Europe." It is challenged by many Indian writers, who assert-but far greater importance than the Chief Census Officer to the omission of females at the enumeration.

MARRIAGE.

Although it is now rare in India, with orthodox Hindus marriage is a religious sacrament which involves some backward practices. With the advent of the 20th century, however, the percentage of the population who are not married has risen to 30 per cent, and the percentage of females over 30 who are not married has risen to 40 per cent.

Marriage Universal—This unit is the only of marriage constitutes one of the most striking differences between the social practices of India and those of Western Europe. It has often been explained on the ground that, with the Hindus, marriage is a religious necessity. Every man must marry in order to beget a son who will perform his funeral rites and rescue his soul from hell. In the case of a girl it is incumbent on the parents to give her in marriage before she reaches the age of puberty. Failure to do so is punished with social ostracism in this world and hell in the next. But it is not only with the Hindus that marriage is practically universal, it is almost equally so with the Mohammedans, Animists and Buddhists.

reference to the age statistics shows that the great majority of the unmarried of both sexes are very young children, three-quarters of the bachelors being under 15 years of age, while a somewhat larger proportion of the spinsters are under 10, only one bachelor in 24 is over 30, and only one spinster in 14 is over 15. At the higher ages percentages of both sexes are very small, and the difference between the two is not very marked. It is the persons of the above class alone are permitted to them by the rules of their community. It is the persons of the above class alone are permitted to them by the rules of their community.

It is possible that this is partly the disease. The greater efforts which have been made in recent years to house the lepers in asylums have also helped to prevent the disease from spreading. The total number of asylums in India is now 73, and they contain some five thousand inmates, or about 4.7 per cent of the total number of lepers. This may not seem much, but it has to be remembered that the movement is still in its infancy, and that progress has been very rapid in recent years. Comparative statistics for 1901 are not readily available, but it is known that in the two provinces of Bengal and Bihar and Orissa, the number of lepers in asylums was then only about half what it is now. The greater part of the credit for the provision of asylums for these unfortunate persons belongs to the Mission for Lepers in India and the East, which receives liberal help from Government. Its latest report shows that there are 3,537 lepers in the forty asylums maintained by the Society.

The belief is growing that leprosy is communicated from one human being to another by some insect, and two South African doctors have recently published papers implicating the bed bug (*Cimex lectularius*). It is this theory by which it is obvious that the segregation of lepers in asylums must reduce the number of foci of the disease, and to that extent prevent it from spreading. It is worthy of note that in many of the districts where the disease was most prevalent in 1891, there has since been a remarkable improvement. Chamba which in 1891 had 34 lepers in every ten thousand of its population, now has only 15, in Birmah the corresponding proportion has fallen from 35 to 16, in Bankura from 36 to 23, in Sami 29 to 18, in Debra Dun from 20 to 11, in Garhwal from 17 to 10, in Budwan from 22 to 14 and in North Arakan from 28 to 20.

OCCUPATIONS.

Nowhere are the many points of difference in the local conditions of India, as compared with those of western countries, more marked than in respect of the functional distribution of the people. In England, according to the returns for 1901, of every hundred actual workers, 58 are engaged in industrial pursuits, 14 in domestic service, 13 in trade and only 5 in agriculture, with 14 in India 71 per cent are engaged in pasture and agriculture and only 29 per cent in all other occupations combined. The preparation and supply of material substances afford a means of livelihood to 19 per cent of the population (actual workers) of whom 12 per cent are employed in industries, 2 in transport and 5 in trade. The extraction of minerals supports only 2 persons per million, the civil and military services support 14, the professions and liberal arts 15, and domestic service 18, persons per million. The difference between the local conditions of India and those of Europe during the last century in consequence of the discovery of the steam engine, and to the great improvement in means of transport and the use of mechanical power in factories of all kinds which have resulted therefrom in Germany, sixty years ago, the agricultural population was very little less than it is at the present time in India. There are, as we shall see further on, indications that in the latter country also great changes are impending, and it is not unlikely that, as time goes on, the functional distribution of the people will become less dissimilar from that now existing in Europe.

Until the recent introduction of western commodities, such as machine-made cloth, kerosene oil, umbrellas and the like, each village was provided with a complete equipment of artisans and mechanics, and was thus almost wholly self-supporting and independent. Its inhabitants skinned the dead cattle, cured their hides, and made the villagers' sandals and shoes. Local carpenters made their ploughs, local blacksmiths their shares, local potters their utensils for cooking and carrying water, and local weavers their cotton clothing. Each village had its own oil-presses, its own washermen, and its own barbers and scavengers. Where this system was fully developed, the duties and remuneration of each group of artisans were fixed by custom and the caste rules strictly prohibited a man from entering into competition with another of the same caste. The barber, the washerman, the blacksmith, etc.,

just beginning to appear in India, necessarily presents the sufferer from leprosy in talk. Clear institutions were given to the enumerators to enter only persons who were congenitally afflicted. Some few, perhaps, may have been included in the return who had lost the power of speech or hearing after birth, but the total number of such males is now very small in India as a whole. 74 males and 53 females per hundred thousand are deaf and dumb from birth. These proportions are much the same as those obtaining in European countries.

Blindness.—In India as a whole fourteen persons in every ten thousand of the population are blind, as compared with from eight to nine in most European countries and in the United States of America. It is a matter of common observation that blindness is ordinarily far more common in tropical countries than in those with a temperate climate. It is, however, less common in India than in parts of Eastern Europe, in Russia, for instance, nineteen persons in every ten thousand are blind.

Lepers.—In India as a whole 51 males and 18 females per hundred thousand persons of each sex are lepers. Of the different provinces, Assam suffers most, then Burma, and then in order Bihar and Orissa, the Central Provinces and Berar, Madras, Bengal, Bombay, the United Provinces, the Punjab and the North-West Frontier Province. In the two last-mentioned provinces there are only 17 male and 8 female lepers per hundred thousand of each sex. The occurrence of leprosy is very local and its prevalence varies enormously within provincial boundaries.

The number of lepers has fallen since 1891 from 126 to 109 thousand, a drop of more than 13 per cent. When it is remembered that the number of persons suffering from the other three infirmities taken together has remained almost stationary, it may be concluded that the decrease in the reported number of lepers is genuine and indicates a real diminution in the prevalence of

fore that so far as India is concerned, in spite

of the growing number of cotton mills in the Bombay Presidency and elsewhere, the hand industry still, to a great extent, holds its own. Only 13,000 persons are employed in silk spinning and weaving factories, 7,000 in woollen factories including those for the making of carpets and even smaller numbers in other factories of this class. Some of these textile industries are very local. Those connected with jute are practically confined to Bengal, in which province nine-tenths of the persons supported by them were enumerated. More than half the persons were enumerated on rope, twine and string making and on working in 'other fibres' chiefly colic, and plying. There were enumerated in Madras and its Native States and a quarter of those supported by wool industries in Hyderabad. Half the silk spinners and weavers are found in two provinces, Bengal and Madras. The dyeing, bleaching and printing of textiles and lace, crape and similar industries are almost unknown in Assam, Bengal, Burma and the Central Provinces and Berar.

Growth of Industry—As compared with 1901 there has been a decrease of 6.1 per cent in the number of persons supported by textile industries. This is due mainly to the almost complete extinction of cotton spinning by hand weaving by hand has also suffered severely from the competition of goods made by machinery both in Europe and in this country. There has been a large increase in the number of Indian cotton mills, but as the output per head in factories is far greater than that from hand-looms, the addition of a given number of factory hands involves the displacement of a far larger number of hand workers.

Hides—As compared with 1901, a large decline in the number returned as general work-ers in hides is partly compensated for by an increase in shoe, boot and sandal makers. In the two heads taken together there has been a drop of about 6 per cent. During the same period the number of hide dealers has more than doubled. Owing to the growing demand for hides in Europe and America and the resulting high prices, the export trade in hides has been greatly stimulated. The local cobbler, on the other hand, having to pay more for his raw material and feeling the increasing competition of machine-made goods has been tempted to abandon his hereditary craft for some other work in factories of various kinds.

Woodworkers—Wood cutting and working and basket making support 2.6 and 1.3 million persons, respectively, or 3.8 million in all. The number of factories devoted to these industries is still inconsiderable. Saw mills and timber yards each employ some 12,000 persons and carpentry works about 5,000. There is only one cane factory with 46 employes.

Metal workers—The workers in metals are only about half as numerous as those in wood and cane. About three-quarters of the persons in this order are general workers in iron, and one-seventh are workers in brass, copper and bell-metal.

The total number of persons dependent on metal industries shows a decline of 6 per cent as compared with 1901.

Earthenware—The manufacture of glass, bricks, and earthenware supports in all 2.2 million to a third of a million persons.

It is clear therefore that so far as India is concerned, in spite of the growing number of cotton mills in the Bombay Presidency and elsewhere, the hand industry still, to a great extent, holds its own. Only 13,000 persons are employed in silk spinning and weaving factories, 7,000 in woollen factories including those for the making of carpets and even smaller numbers in other factories of this class. Some of these textile industries are very local. Those connected with jute are practically confined to Bengal, in which province nine-tenths of the persons supported by them were enumerated. More than half the persons were enumerated on rope, twine and string making and on working in 'other fibres' chiefly colic, and plying. There were enumerated in Madras and its Native States and a quarter of those supported by wool industries in Hyderabad. Half the silk spinners and weavers are found in two provinces, Bengal and Madras. The dyeing, bleaching and printing of textiles and lace, crape and similar industries are almost unknown in Assam, Bengal, Burma and the Central Provinces and Berar.

Of the 75,000 persons supported by work in quarries and mines for non-metallic minerals, other than coal and salt, two-fifths were enumerated in Bombay, where the quarrying of stone and limestone is an important business chiefly in the neighbourhood of Bombay city. In Bihar and Orissa and Madras mica mining is of some importance.

The extraction of salt and saltpetre supports 78,000 persons. Nearly a third of the total number are found in Bihar and Orissa, where the Nanyas are still largely employed in digging out and refining saltpetre. This industry is carried on also in the Punjab. Rock salt is mined in the same province and in Rajputana. The total number of persons employed in the extraction of minerals has risen during the decade from 235 to 517 thousand. The most noticeable increase is in Coal mines and petroleum wells which embrace nearly three times as many persons as in 1901. The bulk of the increase has occurred in Bengal and Bihar and Orissa, but it is to be noted that Hyderabad and the Central Provinces and Berar which now contribute about 12,000 persons to this group gave practically none ten years previously. Mines for metals are 2.5

times as numerous as they were in 1901. Industries—Of the 35.3 million persons dependent on industrial occupations, nearly one-fourth, or 2.6 per cent of the total population, are supported by textile industries. Of these, the most important, from a numerical point of view, are industries connected with cotton spinning, sizing and weaving. The number of persons supported by cotton spinning, sizing and weaving is close on 6 millions, and another half million are employed in spinning, cleaning and pressing the raw material. The proportion of the population supported by cotton spinning, sizing and weaving is 37 per mille in the Punjab, 29 in Bombay and Rajputana, 27 in Madras, 22 in the Central Provinces and Berars and 18 in the United Provinces. In it is much smaller, ranging only from 8 to 11 per mille. Nearly two-fifths of a million persons are supported by rope, twine and string making, and more than a third of a million by silk spinning and weaving. Other important mining, pressing and weaving. Other important textile industries are wool spinning and weaving, silk spinning and weaving, and dyeing and printing, etc., each of which supports from a quarter to a third of a million persons.

Prices and Wages

In the section on the trade of India (p 243) but reference is made to the course of prices and wages. The subject was further analysed in the official volume on Prices and Wages in India published during the year. The salient points of this report are indicated in the following extracts—

Before analysing the rise of prices in 1913, it is convenient to summarise the general movement of prices for the last two decades. The general level of wholesale prices is now 40 per cent higher than it was two decades ago. In 1912, the general average was 41 per cent higher than in the quinquennial 1890-94. If a smoothed average be taken, say the quinquennial 1908-12, the rise was 37 per cent higher than during the quinquennial 1890-94. This rise has been especially marked since 1905. The increase in price has been greatest in the following classes of articles: Hides and skins, food grains building materials and oils, all of which have risen 40 per cent or more above the level of the period 1890-94. It is not resting also to note that the rise has been greater in some areas than in others. If the average of 1905 to 1912 be taken the rise has been above 30 per cent in the following areas as compared with basic period of 1890-94: Karnataka (43 per cent), Bundelkhand (35 per cent) the United Provinces (38 per cent) the Punjab East (36 per cent), Punjab (35 per cent) the United Provinces (41 per cent), Sind (35 per cent) the Punjab East (36 per cent), Punjab (35 per cent), the United Provinces and Berar (35 per cent), Bengal (36 per cent), Madras (35 per cent), Deccan (36 per cent), Chhota Nagpur (31 per cent), and Gujarat (31 per cent).

On the other hand, the rise has been comparatively small in Assam, which is practically free from famine. The rise at the ports except Karachi has been less than in most of the up-country areas, but in comparing the ports with prices elsewhere it should be borne in mind that at the ports were generally higher than in other areas and that an equal rise in prices would result in a lower percentage of rise at the ports. The prices at the ports do not fluctuate within such wide limits as those in up-country areas, such as Bundelkhand. The disparity also between the prices in good and bad years is remarkable, but with the linking up of markets and railways, the variations between districts and districts are now very much less than they were formerly.

Upward Trend—The marked upward tendency in the prices of Indian products in the world markets continued in 1913. Just rose 15 per cent, wheat 14 per cent, sugar and tobacco 10 per cent each, poppy seed and madder 9 per cent each, rice and gram 8 per cent each, barley 5 per cent, flour wheat and rapeseed 3 per cent each and ragi 1 per cent.

WAGES IN 1913 AND 1914.—The statistics of wages of skilled and unskilled labour paid in districts of British India for 1913 are not now available, as the half-yearly returns of wages submitted by district officers have been discontinued and a quinquennial wage census, the first of which was taken in 1911-12 was instituted in place of a general rise in wages in these industries. The statistics of wages of skilled and unskilled labour paid in districts of British India for 1913 are not now available, as the half-yearly returns of wages submitted by district officers have been discontinued and a quinquennial wage census, the first of which was taken in 1911-12 was instituted in place of a general rise in wages in these industries.

Wage-earners' benefit—The general conclusions show that the income of wage earners has generally increased considerably faster than their cost of living, which has resulted in a substantial improvement in the material condition of agricultural and general labourers and artisans who form the majority of the wage-earning class. Taking India as a whole, the rise in real wages of general labourers has been greatest in the Punjab East, Agra Provinces and Bundelkhand. Next to this class the rise in real wages in India as a whole has been greatest in the case of village artisans. The rise in the cost of living in the Punjab East, Bundelkhand, Bihar and Agra Provinces, North and West. The third class in order of rise for all India is the agricultural labourer. The rise in real wages for this class has been above 50 per cent in the Punjab East, Agra Provinces and Chhota Nagpur, between 40 and 50 per cent in Agra Province North and West, Punjab West, Bundelkhand, Berar and Madras South. Next in order of importance come, firstly the artisans employed in urban areas other than large cities, secondly, general labourers in cities and thirdly, the city artisans. In India, as a whole, the rise in real wages has been lowest for domestic servants both in cities and other urban areas and as a matter of fact in some circles there has been an actual fall in real wages, that is, the rise in nominal wages has not been so great as that in the cost of living. To sum up it may be said that in India, unlike most other countries, the rise of prices has been fully met by a rise in wages in the case of skilled or unskilled labourers, not employed in industries or on railways and industrial or railway labourers have, in some parts of India, secured an increase in wages compared with the rise in prices while in other parts of India, wages have been smaller than the increase in the cost of living. It is, therefore, in these latter areas that industrial and railway labourers have not profited by the rise in prices and in this respect they are therefore similar to those on fixed incomes, such as professions and solely from shares and other securities.

Retail Advance—There was also a general rise in the retail prices of food-grains in India in 1913 as compared with 1912, the highest rise being in the prices of arhar dal (10 per cent) and the lowest in Ragi (*Eleusine coracana*) (2 per cent). Bajra (*Pennisetum typhoides*), however shows a fall of 7 per cent and Jawar (*Andropogon sorghum*) 1 per cent. The average fluctuation for all India in the prices of food-grains was a rise of 3 per cent over the price of 1912. There was no fluctuation in the average price of maize and salt in India.

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1 per cent in January 1914 is compared with January 1913 —

Rate for January 1914 expressed in index numbers (rate for January 1913 = 100)

Industry —

Cotton	100
Wool	109
Jute	102
Paper	100
Rice	96
Mining (Coal)	97
Brewing	108
General average	103

The greatest rise is a rise of 9 per cent each in the cotton industry in Bombay and in the woollen mills in Upper India. The insulclency of operatives in the cotton factories in Bombay has been a serious hindrance to the chief industries —

Industry, and is due to the great demand for unskilled labour elsewhere, chiefly in the Public Works Department and at the docks, and also to such root factors over long periods as plague, etc., which arrest the natural growth of the population at a time of considerable industrial expansion. The jute industry shows a rise of 2 per cent. In the early part of the season, labour was fairly plentiful. In the beginning of the hot weather the jute mills started a five day week and the exodus of labourers, especially the weaver class to their country homes was in consequence even larger than in previous years. The paper industry in Bengal records no change, while the coal industry shows a fall of 3 per cent. The rice milling industry in Rangoon also shows a slight fall of 4 per cent. There was no material change in the garden, where labour conditions remained on the whole the same as in previous years. The table below gives the rates for the past three years for different class of wage earners in the chief industries —

Average rates of wages paid in selected industries

Industries	1912	1913	1914
(1) Cotton	Rs 1 p	Rs 8 10	Rs 17 3 s
(2) Wool	15 9 0	16 9 7	17 14 9
(3) Paper	15 9 0	19 12 0	19 12 0
(4) Rice	53 12 0	53 2 0	51 2 0
(5) Brewing	16 2 0	15 1 6	15 14 11
(6) Jute	1 6 0	12 10	3 14 5
(7) Mining (Coal)	0 6 0	0 6 11	0 6 8
(8) Tea { Act coolies { Non act coolies	4 15 5	4 12 5	5 0 0
	4 1 0	4 1 5	4 3 7
"	4 6 9	4 5 11	4 8 8
Month	Rs 1 p	Rs a p	Rs a p
Week	16 2 0	15 1 6	15 14 11
Day	0 6 0	0 6 11	0 6 8

The importance of these industries may be gauged from the statistics of the last census (1911) which show that on the date of the census there were 704,000 employed on tea gardens, 308,000 in cotton mills, 222,000 in other textile industries, and 143,000 in collieries. The rise in the wages of industrial labour has not been so great as in the case of agricultural labourers and village artisans. Money wages of industrial labourers, however, have over long periods increased in all industries and the rise has generally been greater than or equal to the rise in retail prices except in the tea, sugar and brewing industries.

Indian Education.

Indian Education.

The first of these is the fact that the Indian population of the United States has increased from 100,000 in 1880 to 250,000 in 1900. This increase has been due to a number of causes, but the most important is the fact that the Indian population has been increasing at a much faster rate than the white population. This is due to a number of factors, including the fact that the Indian population has been increasing at a much faster rate than the white population. This is due to a number of factors, including the fact that the Indian population has been increasing at a much faster rate than the white population.

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THE BIRTH OF INDIAN EDUCATION

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The seeds of an interest in education were sown by Warren Hastings in use at least part of the study or English already at work in the college. The seeds of an interest in education were sown by Warren Hastings in use at least part of the study or English already at work in the college. The seeds of an interest in education were sown by Warren Hastings in use at least part of the study or English already at work in the college.

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GROWTH AND ORGANISATION OF ENGLISH EDUCATION IN INDIA.

Indians to desire and work for English Education. From that time forward the far-sighted observer must have realised that a movement had begun which whether we would or not we could no longer check. The same phenomenon was witnessed on the Western side of India and Mountstuart Elphinstone's *Annals on Education*, dated March 1824, describes particular notice for its recognition of the necessity of introducing a knowledge of European sciences in any scheme of education as well as for its wise restraint in dealing with Oriental learning. For though his declared object was to establish English schools and encourage the natives in the pursuit of European sciences, he repudiates the idea that the purely Hindu side of education should be totally abandoned. In his own words "It would surely be a preposterous way of adding to the intellectual treasures of a nation to begin by the destruction of its indigenous literature, and I cannot but think that the future attainment of the natives will be increased in extent as well as in variety by being, as it were, cultivated on their own previous knowledge and imbued with their own original and peculiar character." Elphinstone's interest in educational matters was sufficiently appreciated by the citizens of Bombay who in 1827, the year of his departure, resolved to found two professorships in his memory. "to be held by gentlemen from Great Britain until the happy period when natives shall be fully competent to hold them." It is sufficiently clear not only that an interest had been aroused in English education but that some attempts had been made to meet the interest before 1825, though Lord Curzon may have given a just estimate of the situation at the Educational Conference of Simla in 1801 when he said "Education there was, but it was narrow in its range, exclusive and spasmodic in its application, religious rather than secular, theoretical rather than utilitarian in character. Above all, it wholly lacked any scientific organisation and it was confined to a single sex."

It is, of course, just the possibility of grafting modern western knowledge on the old Indian stocks that is open to doubt. Here lies the significance of Macaulay's famous tirade on Oriental science, which deserves quoting for the contrast it forms to the juster estimate of Mountstuart Elphinstone. It is perhaps more offensive to Indian ears for the element of truth it contains, though the entirely unsympathetic form in which he expresses himself is a sufficient stumbling-block in itself. "The question before us," he writes, "is simply whether, when it is in our power to teach languages in which, by universal confession, there are no books on any subject to be compared to our own, whether, when we can teach European science, we shall teach systems which, by universal confession, differ they differ from those of Europe, differ for the worse, and whether, when we patronise sound philosophy and true history, we shall countenance at the public expense, medical doctrines which would disengage an English farmer, astronomy which would laugh at the girls at an English boarding-school, history abounding with kings thirty feet high and ruins thirty thousand years old, and geography made up of seas of treacle and seas of butter." The reiterated phrase "by universal confession" is beyond the mark, but when he is surely right in his valuation of ancient Hindu science as science or history, as *history*. Where he was surely wrong was in his implied condemnation of Indian literature as *literature*. From that point of view you might just as well condemn Homer for in his implied condemnation of Indian literature as *literature*. Where he was possibly wrong was in his vehement antipathy to the view that, if modern science is to be taught, it should be taught through the medium of Indian languages. Yet here too he represents an attitude which was fast becoming that of enlightened Indians. And, if there were no other reasons, the ultimate utility to the Government itself of Indians trained in the English language is to be seen in the fact that the Government of India, in 1844, stated that in the selection of candidates for public employment, preference would be given to those who had been educated in the newly-fashioned type of institution. An adherent of the old-fashioned intellectual ideal of college

Universities Established

Macaulay's period of service on the Committee of Public Instruction (first formed in 1824) gave considerable impetus to the movement he advocated, as figures will show. Whereas the Committee had no more than fourteen institutions under its control in Bengal when he joined it, this number was more than trebled by the end of 1837, the larger part being Anglo-Vernacular schools or colleges. Progress continued along these lines in Bengal, and more slowly in other Presidencies, until in 1852 the numbers under instruction in Government colleges amounted to 25,372 of which 9,888 were for English education (James p. 34). The increase of numbers must have been materially affected by a Resolution of Lord Hardinge's Government in 1844 in which it was stated that in the selection of candidates for public employment, preference would be given to those who had been educated in the newly-fashioned type of institution. An adherent of the old-fashioned intellectual ideal of college

Statement of Educational Progress in INDIA

13

	1908 09	1909 10	1910 11	1911 12	1912 13	1913 14
Area in square miles	1,144,107	1,145,728	1,152,801	1,155,513	1,137,686	1,117,686
Population	123,219,836	122,690,630	130,114,723	130,408,551	130,702,188	130,702,188
{ Male	119,570,460	119,017,058	124,700,803	124,000,002	121,851,633	124,851,611
{ Female	242,850,305	241,717,688	254,820,916	255,308,553	255,153,821	255,153,821
Public Institutions for Adults	123	128	128	140	128	138
Number of arts colleges	1,174	1,100	1,203	1,219	1,273	1,149
Number of high schools*	100,320	107,403	108,144	110,602	113,955	110,650
Public Institutions for Adults						
{ Male	18,788	22,012	21,806	20,369	32,031	38,810
{ Female	316,005	344,047	364,047	300,881	428,182	405,186
{ In primary schools	3,786,402	3,888,071	3,936,410	4,202,631	4,428,531	4,008,405
{ Percentage of male scholars in public institutions to male population of school-going age	25.15	26.2	26.34	26.8	28.4	29.8
Public Institutions for Females						
{ Number of arts colleges	7	8	8	10	10	11
{ Number of high schools*	124	125	130	135	144	157
{ Number of primary schools	11,511	11,753	12,027	12,866	13,094	14,722
Female Scholars in Public Institutions						
{ In arts colleges	185	217	244	270	318	353
{ In high schools*	13,054	14,557	14,804	10,884	18,515	21,095
{ In primary schools	691,006	698,636	690,471	785,511	832,002	900,766
{ Percentage of female scholars in public institutions to female population of school-going age	4.0	4.2	4.24	4.7	6.0	6.4
For VI. SCHOLARS in public institutions						
{ Male	4,630,134	4,820,554	4,030,084	5,253,065	5,550,541	6,823,215
{ Female	720,342	763,680	793,040	876,060	928,983	1,019,621
{ Total	5,370,476	5,590,134	5,723,724	6,128,725	6,488,824	7,842,836
For VI. SCHOLARS (both male and female) in all institutions	5,072,204	6,203,805	6,346,582	6,780,721	7,149,065	7,518,147
Dependents (in thousands of rupees)						
{ From provincial revenues	2,12,42	2,34,30	2,42,08	2,60,50	2,39,25	3,04,54
{ From local funds	1,17,24	1,02,24	1,00,82	1,05,80	1,23,08	1,47,01
{ From municipal funds	24,27	24,50	28,00	29,84	33,28	37,07
{ Total expenditure from public funds	3,53,93	3,61,10	3,70,40	4,05,28	4,05,61	5,50,11
{ From fees	1,09,37	1,85,42	2,00,67	2,10,09	2,40,62	2,60,64
{ From other sources	1,35,18	1,40,24	1,47,01	1,91,01	1,65,06	1,85,40
GRAND TOTAL OF EXPENDITURE	6,58,48	6,80,70	7,18,08	7,56,93	8,02,09	10,02,24

* High schools include vernacular high schools also in some provinces.
 † The percentages for 1910-11, being reckoned on the non Census figures are slightly misleading for purposes of comparison with previous years.
 ‡ This remark applies throughout all the Tables.

It would see in this Resolution a fatal concession to the utilitarian view and a fatal misdirection of public attitude towards education

Meanwhile educational institutions had so multiplied throughout India that the time was becoming ripe for the decisions arrived at in Sir Charles Wood's Despatch of 1854. The old idea had been that the education imparted to the higher classes of society would gradually "filter down" to the lower classes. How little true it is that education could ever filter down to the masses in India by its own percolative properties is evident enough even now when our wide system of schools entirely fails to touch the majority of India's population. The Despatch of 1854 marks a departure from the "attrition" policy and a recognition on the part of an enlightened Government of educational duties, even towards sections of the population who had never entertained the idea of Government obligations in their direction. The result of the Despatch was the formation of Departments of Public Instruction on lines which do not differ at all essentially from Departments of Public Instruction of the present day. They represent a direct desertion of the *laissez faire* or *filtration* policy, and an attempt on the part of the Government to "combat the ignorance of the people which may be considered the greatest curse of the country." Another feature of the Despatch was an outline of a "University" system, which formed the basis of the scheme adopted in 1857 when Acts were passed for the incorporation of three Universities, one for Calcutta, one for Bombay and one for Madras. As Lord Curzon said "The Indian Universities may be described as the first fruits of the broad and liberal policy of the Education Despatch of 1854." He might have gone further and said that the scheme outlined in it not only originated suggestions for their proper conduct whose value has only recently been understood in its proposal of a distinction between "common degrees" and "honours" degrees it anticipated the actual procedure of at least one University, that of Bombay, by nearly sixty years.

Private Agencies

The Despatch of 1854 and the orders based on it, together with later resolutions and modifications, organized education into something like the present system. Government took the whole thing into its own hands and established Universities, colleges, high schools and extended elementary education so as to reach the masses and also to establish a system of inspection with a view to guaranteeing the efficiency of private institutions which should be allowed grants-in-aid as well as Government Institutions themselves. Expansion under control sums up the aims of this combined system of grants-in-aid and inspection. As James put it "Local management under Government inspection stimulated by grants-in-aid, was to supplement and finally, perhaps, in large measure, to supersede direct management by Government." (p. 48) The latter part of the sentence may have been the

Great Expansion

The period from 1882 to the beginning of the new century is one of phenomenal expansion. There was a general stampede for education, and no proper regard was paid to the standard or quality of the product. It is this period which it any deserves the opprobrium incurred by education in India. And it is the universities which stand out as the chief sinners. There can be no reasonable doubt that students were being turned out with degrees attached to their names who could not be regarded as educated from any respectable standpoint. As a man who is doubtful whether an act of his really is so praiseworthy as the general chorus of congratulation had led him to suppose, suddenly, with tremors at the thought of the revolutions of opinion that is sure to follow if he turns out to have done wrong, feels certain and Vice-Chancellors of this period gradually arrived at the conviction that something was wrong with the seemingly excellent product of the Despatch of 1854 and the Commission finally it invaded the sphere of Convocation addresses. At last in 1901 the Vice-Chancellor of the University of Calcutta made this statement "For the first time, the Chancellor asks the University to consider the possibility of constitutional reform." In September of that year an educational conference was convened at Simla by the Viceroy Lord Curzon. In 1902 the Indian Universities Commission was appointed and in 1904 an Act was passed to amend the law relating to the Universities of British India.

inspiration of the Commission or 1902 appointment to inquire into the way in which the recommendations of the Despatch of 1854 had been carried out. The result of the Commission was to relax the control exercised by Government over education. Government's with instruction. The idea was to encourage private enterprise in the founding of secondary schools. But though the recommendations of the Commission included much talk of conditions and cautions and of the necessity of maintaining a high standard, the addition of a further recommendation that the managers of aided schools and colleges be permitted, if they wished, to charge fees less than Government schools of the same class led in the result to a general deterioration of standard. The recommendations of this Commission appear to some as a charter of inefficiency. They are the avenue to educational institutions run as a business proposition. Meanwhile perhaps the most creditable feature of the Commission's Report was its insistence on the importance of Primary Education and its recommendation that primary education be declared to be that part of the whole system of Public Instruction which possesses an almost exclusive claim on local funds set apart for education and a large claim on provincial revenues. The least creditable feature is its recommendation "that preference be given to that system which regulates the aid given mainly according to the results of examination." "To pay by results is willfully to encourage the cramming institution is willfully to encourage the cramming institution."

Statement of Educational Progress in MADRAS

	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14
Area in square miles						
Population { Male Female						
Total Population						
Public Institutions for Males						
Number of arts colleges	32					34
Number of high schools	140					176
Number of primary schools	22,412					26,018
Male Scholars in Public Institutions						
In arts colleges	4,227	3,011	3,709	4,893	5,401	7,028
In high schools	66,180	72,073	69,643	71,204	77,681	86,364
In primary schools	680,817	730,033	766,884	820,331	889,303	952,035
Percentage of male scholars in public institutions to male population of school-going age	27.8	30.8	20.7	30.8	33.1	15.7
Public Institutions for Females						
Number of arts colleges	1	1	1	2	2	2
Number of high schools	12	41	32	33	32	35
Number of primary schools	802	886	940	1,102	1,281	1,443
Female Scholars in Public Institutions						
In arts colleges	38	37	32	46	60	60
In high schools	4,981	4,212	4,027	4,610	4,080	5,404
In primary schools	135,784	147,010	150,027	190,710	223,835	248,211
Percentage of female scholars in public institutions to female population of school-going age	5.8	0.2	0.1	0.0	7.4	8.2
Total Scholars in public institutions { Male Female						
Total	813,056	870,505	890,701	943,309	1,011,753	1,085,518
Total population in public institutions { Male Female	108,167	181,461	190,801	200,617	234,107	259,706
Total	981,223	1,051,966	1,087,502	1,152,880	1,245,860	1,345,654
Total scholars (both male and female) in all institutions	1,090,916	1,178,918	1,215,725	1,280,065	1,302,182	1,400,945
Expenditure (in thousands of rupees)						
From provincial revenues	27.70	39.07	43.16	44.22	58.20	65.60
From local funds	20.91	11.15	11.24	12.28	17.27	(a) 23.94
From municipal funds	3.81	5.17	3.21	3.15	1.15	(b) 6.63
Federal expenditure from public funds	62.54	64.60	67.01	69.05	79.62	9.26
From fees	2.60	11.80	17.29	37.00	41.11	40.00
From other sources	32.17	10.81	12.78	38.10	36.56	38.07
Total of expenditure	1,71,141	1,19,110	1,27,088	1,30,005	1,67,602	1,70,300

* Include all of expenditure which schools for girls
(c) Include total contribution of Rs. 1,64,701

(b) Includes provincial contribution of Rs. 1,62,069

UNIVERSITIES ACT AND PRESENT SITUATION.

The Commission of 1882, which favoured the policy of withdrawing higher education from the control of Government within certain limits and of allowing colleges and secondary schools conducted by private enterprises to reduce their fees, though in many details it led to a general inefficiency and lowering of standard in higher education. In some matters it anticipated all that has hitherto been done. For example, in suggesting that there should be two sides in secondary schools, "one leading to the entrance examination of the Universities, the other of a more practical character, intended to fit youths for commercial and other non-literary pursuits," it still anticipates Government action by many years. The Universities Commission of 1902 proposed to make the School Final examination a preliminary test for certain professions and posts in Government service and to substitute it for the Bachelaration as a general qualification, even, if possible, as a test of fitness to enter the University. The latest statement of Government policy (dated Feb. 1913) re-asserts and emphasises these proposals, which are in attempt to enforce the suggestion of the Commission of 1882. But the general relaxation of Government control seemed to Lord Curzon the radical evil of his day.

New Senates

Not to speak of the lowering of efficiency and colleges by private enterprise, we may mention among the more glaring defects which Lord Curzon had to face the madamistral-tion of the Universities due to the mistake of their composition. All kinds of people had except into the Senates of Universities who from the true educational point of view had no business there. The numbers had become unwieldy so that it was impossible to get passed even necessary reforms. The progress of education was retarded and modern innovations simply ignored. As reconstituted the Universities have reversed their regulations and though they have not ceased to be examining universities they have taken upon themselves the necessary function of inspecting the colleges affiliated to them. They have also received powers of becoming teaching bodies. Little has yet been done to make them that, but it may be judged from utterances in their Senates that they are becoming increasingly conscious of their possibilities or duties in this direction. In the last Resolution on Education (Feb. 1913), it was decided that the principle of an examining and affiliating University must still be maintained. Nevertheless a movement is proceeding in the direction of "new local teaching and residential Universities within each of the provinces in harmony with the best modern opinion as to the right road to educational efficiency." Under the present system it is no longer impossible to pass radical changes. The Senate of each University has been reduced to one hundred or less in number, and the Act Synodicate, the executive body in the University, a certain number of those actively engaged in educational work should be selected.

Policy of 1913

The influence of Lord Curzon on educational progress has been generally salutary. For though his reforms had the air of restriction and raised a general outcry in India—"the least that Lord Curzon was charged with was a deliberate attempt to throttle higher education in India"—it is now recognised by enlightened thinkers that all promises of educational reformed careful review. Before any quantitative increase took place, it was necessary to reform the qualitative basis. A glance at the work done is summarised by the last Quinquennial Review will show how the machinery has been cleaned. The Universities are now respectable, secondary schools have been improved and placed under stricter conditions of recognition, attention, though insufficient, has been paid to the training of teachers, in primary schools examinations have been simplified, buildings improved, the day of teachers raised, the courses of studies revised and widened. In these circumstances the Government Resolution of 1913 was justified in its aim to extend educational institutions on every side. It proposed to double the number of primary schools (a scheme which may be regarded as a compromise between the policy of *laissez faire* and that of compulsory education), and to encourage the establishment of a greater number of second-ary schools on the lines of private enterprise by increased grants on conditions of submission to Government inspection, recognition, and control. One of the most interesting features of the Resolution is Government's desire to develop the hostel system. In the words of the Resolution "The Government of India desire to see the hostel system developed until there is an adequate residential accommodation attached to every college and secondary school in India." Altogether the Resolution of February 1913 ranks as a notable pronouncement, ranking as it does over every conceivable topic, from the Universities to what is often called Female Education, with a depth of insight and a readiness to face the most complex problems of finance and organisation that augurs well for educational progress. There is reason to hope that our educational system in India will stand out as one of the most remarkable achievements in the history of imperial politics.

University Organisations

These Universities are examining bodies with colleges affiliated to them. The Gover-

nor-General is the Chancellor of the University to control the work of a particular subject The Faculties are in most cases those of Arts, science, law, medicine and engineering. There is an official faculty in the Punjab University alone Each of the main branches of study in a University is represented in addition by a Board of Studies, that is, an advisory body whose duties are to look after the curriculum and recommend text books or books which represent the standard of knowledge required in the various examinations The Senate does a whole consists of from 75 to 100 members, the majority of whom are nominated by Government, the remainder being elected by the Senate or its faculties or by the body of graduates of the University

Constitution—There are in British India five Universities with the following territorial limits (Sixth Quinquennial Review, p 207) —

University	Territorial Limits	
	Province (including any Native State under its political control and any foreign possession included within its boundaries)	Native State or Colony
Calcutta	Bengal, Burma, Assam, Bihar and Orissa	Hyderabad, Mysore and Ceylon
Bombay	United Provinces of Agra and Oudh, the Central Provinces (including Berar) and Ajmer-Merwar	The States included in the Rajputana and Central India Agencies
Punjab	Punjab, North-West Frontier Province and British Baluchistan	Kashmir and Baluchistan

Courses and Examinations

The Matriculation Examination is the test for entrance to a University After matriculation, if the student decides to graduate in Arts, he must take a four years' course After two years he takes the Intermediate Examination After another two years he may appear for the Examination for Bachelor of Arts The regulations with regard to Honours vary in the different Universities In Calcutta the honours and pass courses are separate In Bombay the honours student takes in addition to the pass course The degree in addition to the pass course is taken the year after and the honours course is taken three papers In Matriculation (except in Madras) which is taken one or two years after the examination for the B. A. degree If the student elects to take science, his course is one of four years In some Universities he receives the degree of B. A., in others a separate degree of B. Sc Where the separation between Arts and Science is clearly defined, the student takes the Intermediate Examination in Science two years after Matriculation, and two years after this examination appears for that of B. Sc Those students who choose a professional course, e.g., agriculture, law, medicine or engineering, must in most cases first attend an Arts College for one or two years before proceeding to the professional college The student who has graduated as a Bachelor of Law in two years

The annual output of graduates is reckoned in the Sixth Quinquennial Review at 2742, and the proportion of students who graduate in the four main faculties is given as follows —

Arts	85%
Science	20%
Medicine	9%
Engineering	4%

But it should be remembered that in some universities the Arts degree is given for Science subjects

Dacca University.

One of the most interesting features of the last Government Resolution on education is the decision to found a teaching and residential university at Dacca Government also professes themselves willing to sanction under certain

who choose a professional course, e.g., agriculture, law, medicine or engineering, must in most cases first attend an Arts College for one or two years before proceeding to the professional college The student who has graduated as a Bachelor of Law in two years

Statement of Educational Progress in BENGAL

	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14
Area in square miles						
Population	<div>Male</div> <div>Female</div>	<div>124,492</div> <div>26,124,820</div>	<div>124,492</div> <div>27,430,187</div>	<div>No change</div> <div>27,357,153</div>	<div>78,609</div> <div>29,363,225</div>	<div>No change</div> <div>29,117,852</div>
Total Population	53,772,586	52,669,800	53,028,340		45,483,077	
Public Institutions for Males	29	20	20	20	31	31
Number of arts colleges	397	396	399	398	532	570
Number of high schools	84,480	33,201	33,437	30,342	28,107	27,470
Number of primary schools						
Male Scholars in Public Institutions	4,613	7,107	8,251	9,635	12,791	14,693
In high schools	82,822	87,172	94,614	103,090	104,214	182,648
In primary schools	908,939	892,100	897,933	1,047,769	999,110	982,010
Percentage of male scholars in public institutions to male population of school-going age	30.2	32.0	31.4	33.2	40.9	41.4
Public Institutions for Females						
Number of arts colleges	2	3	3	3	3	3
Number of high schools	17	17	21	10	21	23
Number of primary schools	3,029	3,061	3,052	3,124	0,708	7,088
Female Scholars in Public Institutions	42	47	68	81	105	118
In high schools	1,074	2,046	2,301	2,423	3,080	3,638
In primary schools	139,904	145,233	149,223	158,616	206,784	210,137
Percentage of female scholars in public institutions to female population of school-going age	3.0	4.2	4.2	4.0	6.8	7.1
Oral Scholars in public institutions	1,308,718	1,354,014	1,290,621	1,364,946	1,435,452	1,452,313
Total Scholars (both male and female) in all institutions	1,366,280	1,67,505	1,73,207	1,554,917	1,662,765	235,434
Oral Scholars in public institutions	1,421,389	1,475,376	1,518,239	1,609,360	1,718,628	1,957,747
Expenditure (in thousands of rupees)						
on Provincial revenues	49.79	49.03	50.10	54.70	64.07	64.90
on local funds	11.56	11.36	11.64	11.04	15.88	22.23
on municipal funds	1.32	1.41	1.53	1.70	1.56	1.70
Expenditure from public funds	62.67	62.70	63.38	68.10	82.41	88.92
for houses	52.71	56.19	61.02	67.88	86.62	95.60
and total of 1 and 2	29.20	32.00	36.31	36.04	33.08	36.35
	1,44,58	1,50,89	1,60,71	1,72,02	2,02,71	2,20,77

conditions as occasion may demand. An act constituting such the University at Benares has been passed by the Imperial Council this year. These experiments may be regarded as an attempt to get away from the abhating and examining type of University and to conform to that ideal of a University which requires it not only to confer degrees but to supervise the training of intellect and character as closely as possible. A University of this type will turn out graduates who may be trusted to have in their degree satisfactory credentials about their general character and ability. Under the existing system the University turns out graduates of whom it knows absolutely nothing beyond what it learns in examinations.

Colleges

Affiliated to the University are colleges which the University have power to inspect and regulate. In 1913-14 the number of colleges affiliated to the Indian Universities is given as 196, of which 149 are Arts Colleges, 21 Law Colleges, four Medical, four Engineering, three Agricultural, one Commercial, and thirteen Teachers' Training Colleges. The number of students in Arts Colleges was 39,189, and in all Colleges 47,259. All colleges, whether under Government or private management, are inspected by the Universities. Colleges receive financial aid from public funds, both provincial and Imperial. Under the Universities Act the Universities are empowered to make regulations about the residence of college students. This rule now is that students who do not reside with parent or guardian must reside either in a boarding house under supervision or in an approved lodging house. The result has been a larger provision of college residential buildings. The hostel system is definitely encouraged by Government and in the latest Resolution (Feb. 1913) Government express the desire to see the hostel system extended to all colleges and secondary schools. The number of female students was 353.

Schools

Government policy with regard to schools has been to provide a small number of institutions which are to be regarded as models for private enterprise. At the same time they insist on a careful inspection of all schools, whether they are run by municipalities or local boards, by private individuals or by missionary or other societies. Private enterprise is encouraged by an extensive system of grants-in-aid, which are dependent on the efficiency of the school and its expenditure on teachers and general equipment.

Secondary Schools

There is some difficulty in the classification of schools, secondary and primary. Here the fifth Cuneiform Review is followed as issuing from the Director General of Education. Secondary schools are divided into English and Vernacular in the first place. In the former English is a subject of instruction in the lower part and the Vernacular in the upper part of the school. In the latter English is not taught in any way. In the second place these schools are divided

Primary Schools

Here again there is a difficulty of classification owing to the different systems prevailing in the different provinces. However they are divided generally according to grade into lower primary and upper primary. Middle vernacular schools, are classed usually among secondary schools, and really only supersede primary schools in little relation to the systems prevailing in secondary schools. Primary schools, as the Review points out, have been defined as the education of the masses through the vernacular. If the medium of instruction be taken as the differentiation, then clearly middle vernacular schools ought to be classed as primary. In 1913-14 the number of these schools was 116,650. In the Government Resolution of Feb. 1913 it is found the following statement, "It is the desire and hope of the Government of India to see in the not distant future some 91,000 primary public schools added to the 100,000 which already existed for boys and to double the 47 millions of pupils who now receive instruction in them."

Primary to Anglo-Vernacular

The transition from Primary to Anglo-Vernacular schools, that is, from primary to secondary education, is comparable to the transition from a Board school in England to a secondary school under the authority of a Municipal or County Council. But there is a difficulty owing to the different systems prevailing in different Presidencies. Nevertheless in all provinces a boy may begin in a vernacular primary school and pass from it to a secondary school. According to the Cuneiform Review, "in Bombay all children

Statement of Educational Progress in BIHAR and ORISSA.

1913-14	1912-13	1911-12		
No change	No change	18,032,708	Area in square miles	
			Population { Male 9,170 Female 18,827,238	
22,309 91 7	22,482 93 7	21,900 9, 7	Public Institutions for Males	
			Number of arts colleges Number of high schools Number of primary schools	
2,062 28,712 307,907	1,722 28,110 302,242	1,430 23,402 307,341	Male Scholars in Public Institutions	
			In arts colleges In high schools In primary schools	
26.3	26.0	24.9	Female Scholars in Public Institutions	
			In arts colleges In high schools In primary schools	
1,811	1,498	1,230	Public Institutions for Females	
			Number of arts colleges Number of high schools Number of primary schools	
712,501	704,485	668,021	Total Scholars in public institutions	
			Male { Female {	
107,170	95,281	90,953	Total ..	
			Total SCHOLARS (both male and female) in all institutions	
817,082	799,766	760,871	Expenditure (in thousands of rupees).	
			From provincial revenues From local funds From municipal funds	
861,512	817,214	804,058	Total Expenditure from public funds	
			From fees From other sources	
79.92	61.83	75.91	GRAND TOTAL OF EXPENDITURE ..	

be substituted for the study of the village map found a perplexing problem, and it may be doubted whether with wisdom any but indefinite differences can be introduced.

Professional and Technical Education

Industrial schools are to be found dotted about India, some maintained by Government, others by municipalities or local boards and others by private bodies. One of the most important institutions of this type is the Victoria Jubilee Technical Institute in Bombay. There is also the well-known Thomason College of Engineering at Rooree, the College of Science at Poona, and the Sibpur College in Bengal. There are schools of Art in the larger towns of India, where not only architecture and the arts are studied but also practical crafts like pottery and iron-work. There is also a school of Forestry at Dehra Dun in the north of India. Besides these there are many medical schools and colleges which prepare students for the medical degrees of the various Universities, and of which the Grant Medical College in Bombay may be taken as a good example. There are agricultural colleges, the most important of which is the Pusa Agricultural College and Research Institute, which trains experts in specialised branches of agricultural science, such as agricultural chemistry, economic botany, mycology and entomology. We may also mention the Indian Institute of Science at Bangalore, the product of generous donations by the Tata family. Two institutions mark the progress of educational interest in the Bombay Presidency, the Government Institute of Science—for whose capacious building (not yet completed) the Government is indebted to the generosity of Sir Cornwallis John, Sir Jacob Sassoon, and Sir Currimbhoy Ibrahim—and the College of Commerce, instituted to supply teaching in connection with the establishment of a Faculty of Commerce in the University.

Colleges for Teachers

There are training colleges for secondary teachers in various parts of India, and what are called in some cases Training Colleges, in others normal schools, for the training of vernacular teachers. As there has been considerable dissatisfaction, on account of the defective qualities and pay of teachers in schools, Government are now waking to the importance of paying more careful attention to these institutions and the last Resolution provides for a better scheme of pay for teachers.

Education of Girls

Hitherto little attention has been paid to this important branch of education. Even in the latest Resolution nothing is definitely proposed though certain lines are laid down for guidance of entrance in this direction. However there do exist schools and colleges for girls, while a number of the female sex are educated at institutions common to both sexes. Arts Colleges, Medical Colleges and the like admit both male and female students, and a small percentage of women attend them in those Presidency towns, however, where there are no colleges.

proceeding in the vernacular schools before provinces children may do so" (The tables are ours). "The point at which the teaching is usually the highest point in the secondary school to facilitate the transition from the vernacular school system to the secondary school system of children who have pursued the vernacular school course to a higher point than this" (p. 97). It may be useful to describe the actual procedure in one Presidency in Bombay, before proceeding to an Anglo-vernacular school a boy must have passed standard IV of a primary school and a girl standard III. The curriculum of the first three standards of an Anglo-vernacular school is very similar to that of the last three standards of a vernacular school (Standards V, VI and VII)—except that in the Anglo-Vernacular school English is added as a subject, though not used in those standards as the medium of instruction.

Rural Schools

In the provinces of Bombay, Bengal, the Punjab and the Central Provinces a distinction is drawn between rural and urban primary schools. The curriculum differs according to this distinction. In the Central Provinces the distinction was, up to the time of the publication of the last Review, one of time mainly, to allow the boys to spend half their time in agricultural work. The object of rural schools is not so much to teach agriculture as to train the minds of prospective agriculturists in an elementary way. In 1905 an attempt was made in Bombay to introduce agricultural text-books, the effect of which may only have been to destroy the faith of the boys in their father's primitive methods without having any appreciable influence on the improvement of agricultural practices. About a year ago a meeting of educational inspectors decided against this experiment. The whole question of remodelling the rural school courses has been reconsidered, and in Bombay at least that and the ordinary primary course have been brought closer together. A boy who starts in a rural school can now complete the whole primary course in the same time as a boy who starts in an urban school. The idea is that boys educated in rural schools should not be put at a disadvantage. At the same time—and this is important—an attempt has been made to make rural education, however elementary, form a system of elementary education which should be complete in itself. Hence the differences between rural education and ordinary primary education are unimportant and indelible, in Bombay at least. The last Government Resolution declares it to be "not practicable at present in most parts of India to draw any great distinction between the curricula of rural and of urban primary schools," but in the latter class of schools there is special scope for practical teaching of geography, school excursions, etc., and the nature study should vary with the environment and some other form of simple knowledge of the locality might advantageously

Statement of Educational Progress in the UNITED PROVINCES

	1908-09	1909-10	1910-11	1911-12.	1912-13	1912-14
Area in square miles— Male Female Total Population	No change	No change	107,164 24,028,314 22,565,048 47,103,302	107,207 24,041,831 22,540,213 47,182,044	No change	No change
Public Institutions for Males						
Number of arts colleges—	24	31	31	32	32	35
Number of high schools—	108	112	113	116	117	123
Number of primary schools—	9,508	9,207	9,067	9,258	10,158	10,444
Male Scholars in Public Institutions	3,510	4,150	4,180	4,002	4,860	5,286
In arts colleges—	25,647	12,005	33,102	34,257	35,804	38,232
In high schools—	430,369	430,675	432,407	470,053	537,551	554,067
In primary schools—	146	146	144	155	174	181
Percentage of male population in public institutions to male population of school-going age						
Public Institutions for Females						
Number of arts colleges—	4	1	4	5	6	6
Number of high schools—	22	2	20	20	21	22
Number of primary schools—	975	936	911	937	1,008	1,067
Female Scholars in Public Institutions	59	45	51	61	55	60
In arts colleges—	1,827	1,060	1,824	1,804	1,084	2,187
In high schools—	39,416	36,017	37,265	41,310	42,043	46,003
In primary schools—	13	12	13	11	15	16
Percentage of female population of school-going age						
Total—	103,111	113,170	118,161	118,104	124,300	128,707
Male—	11,119	11,520	11,806	11,801	12,260	12,526
Female—	92,000	101,650	106,355	106,303	112,040	116,181
Total—	103,111	113,170	118,161	118,104	124,300	128,707
Public Institutions for Males						
Number of arts colleges—	24	31	31	32	32	35
Number of high schools—	108	112	113	116	117	123
Number of primary schools—	9,508	9,207	9,067	9,258	10,158	10,444
Male Scholars in Public Institutions	3,510	4,150	4,180	4,002	4,860	5,286
In arts colleges—	25,647	12,005	33,102	34,257	35,804	38,232
In high schools—	430,369	430,675	432,407	470,053	537,551	554,067
In primary schools—	146	146	144	155	174	181
Percentage of male population in public institutions to male population of school-going age						
Public Institutions for Females						
Number of arts colleges—	4	1	4	5	6	6
Number of high schools—	22	2	20	20	21	22
Number of primary schools—	975	936	911	937	1,008	1,067
Female Scholars in Public Institutions	59	45	51	61	55	60
In arts colleges—	1,827	1,060	1,824	1,804	1,084	2,187
In high schools—	39,416	36,017	37,265	41,310	42,043	46,003
In primary schools—	13	12	13	11	15	16
Percentage of female population of school-going age						
Total—	103,111	113,170	118,161	118,104	124,300	128,707
Male—	11,119	11,520	11,806	11,801	12,260	12,526
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Percentage of male population in public institutions to male population of school-going age						
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Female—	92,000	101,650	106,355	106,303	112,040	116,181
Total—	103,111	113,170	118,161	118,104	124,300	128,707

Educational Services.

especially for women, and it seems to be particularly widespread that there ought to be, particularly for women, some special measures to be taken to help them to get on their feet. It is not only in the case of women, but in the case of all workers, that the Government has to take steps to help them to get on their feet. It is not only in the case of women, but in the case of all workers, that the Government has to take steps to help them to get on their feet. It is not only in the case of women, but in the case of all workers, that the Government has to take steps to help them to get on their feet.

European Schools

There are schools for Europeans and Muslims in India and they are inspected by Government inspectors specially appointed for the control of European schools and for the allocation of grants to schools under their sphere of influence. The education of the domiciled communities has been found a singularly perplexing problem, and in 1912 a special conference was summoned to consider the matter. The difficulty is that they are a thing apart from the general system of education devoted to Indians proper.

Educational Services

These are divided into (a) the Indian Educational Service, (b) the Provincial Educational Service, (c) the Subordinate Educational Service.

The statistical table of educational progress in British India published for 1913-14 gives the following results —

The grand total of pupils in all institutions (including private institutions) has risen to 7,51,877. The largest increases occurred in Provinces (28,074), Madras (1,07,763), the United Provinces (1,47,201) and Orissa (1,47,201).

15 per cent of the population has risen in the

STATISTICAL RESULTS.

The figures for higher institutions in 1931-2 were as follows:—

(c) Subordinate Educational Service.—The majority of this service are headmasters (a few), assistant deputy inspectors and all the assistant masters in Government high and middle schools. In Bengal a number of poorly paid teachers have been converted into a 'lower subordinate service.' The pay and prospects of this service are not good, and much complaint is made of the inferior nature of the teaching in schools run by its members. In 1907 the figures for this service stood at 6025 about Rs 400. The minimum pay used to be Rs 30, but is now Rs. 40 per mensem.

(b) Provincial Educational Service.—In this service also are found principals and professors of colleges, headmasters and inspectors of schools, and, in addition, translators for Government and members engaged in other exceptional posts. This service is composed of Indians and recruited in India, the pay scheme being arranged on a much lower scale than that of the Indian Service in accordance with the qualifications and the cheaper rates of living of natives of India. The maximum pay is Rs 700, the minimum pay Rs 200. There is a general division between two branches, collegiate and general.

At the head of all Educational department in India, at the seat of Government, is the Member for Education who sits in the Viceroy's Executive Council

higher allowances of Rs 250 to Rs 500, an allowance of Rs 100 after fifteen years of approved service to those who do not receive any of the other allowances. Except for the Director of Public Instruction, the limit of prospect of a member of the Indian Educational Service is Rs 1,500 a month, the average prospects being considerably less. There is no short service pension Scheme as yet. Foot to improve the prospects of the service. Hitherto this service which is in reality one of the most important in the country has not been rightly estimated, though its importance as a rule men of real culture great difficulty of recruitment. The number of posts in this service in 1907 throughout India was 157. Additions have been made since then, but it is clear that the service is undervalued, if one considers the range and importance of its work. Hitherto higher educational work has been little appreciated in India particularly by Englishmen. Now-a-days much is said of its importance, but little done for those who carry it out.

Statement of Educational Progress in the PUNJAB

	1908-09	1909-10	1910-11	1911-12	1912-13	1913-14
Area in square miles						
Population { Male Female						
Total Population	97,272	No change {	97,213	No change {	No change {	No change {
Public Institutions for males			10,092,007			
Public Institutions for females			8,982,880			
Number of arts colleges	10	10	11	11	0	9
Number of high schools	94	98	96	101	102	111
Number of primary schools	3,408	2,345	3,321	3,417	3,080	4,156
Male Scholars in Public Institutions	1,860	2,022	2,270	2,059	2,770	3,163
Female Scholars in Public Institutions	24,971	40,803	44,803	47,740	46,090	47,646
In arts colleges	140,642	167,040	161,081	170,410	167,230	210,700
In high schools	13 8	14-0	15 0	16 9	18 1	10 8
In primary schools						
Percentage of male scholars in public institutions to male population of school going age						
Public Institutions for Females						
Number of arts colleges	12	12	15	16	16	1
Number of high schools	600	602	609	637	709	703
Number of primary schools						
Female Scholars in Public Institutions	944	1,007	1,244	1,603	1,626	1,721
In arts colleges	22,672	26,309	26,174	29,269	32,118	37,109
In high schools	1 9	2 2	2 4	2 7	2 9	3 4
In primary schools						
Percentage of female scholars in public institutions to female population of school going age						
Public Institutions for Males						
Number of arts colleges	226,502	245,722	257,432	279,402	208,014	320,182
In high schools	27,282	30,093	32,160	36,673	39,898	43,031
In primary schools	254,784	270,717	289,018	316,107	337,852	371,813
Total Scholars in public institutions { Male Female	302,576	329,460	346,040	381,113	410,401	430,956
Total Scholars (both male and female) in all institutions						
Expenditure (in thousands of rupees)						
From provincial revenues	17,06	18,01	18,63	22,70	29,70	28,24
From local funds	12,43	12,80	12,31	12,44	16,17	21,00
From municipal funds	3,06	4,43	4,05	3,53	5,06	4,57
Total Expenditure from public funds	33,55	34,43	34,90	38,76	46,92	54,77
From other sources	11,08	13,84	15,20	17,15	20,67	22,92
Grand Total of Expenditure	16,46	10,66	10,38	12,14	18,61	16,234
	65,50	58,43	60,57	68,65	84,20	93,22

* Include also vernacular high schools

† Includes an Imperial contribution of Rs. 2,83,742

The number of pupils in technical schools has increased to 12,751

The number of schools for Europeans and the domiciled Community now stands at 37,078

The number of Muhammadan pupils amount to 1,108,213, of whom 4,966 are in colleges

Expenditure

The total expenditure in 1913-14 was Rs 10,02,23,877, an increase of more than two

crores on that of the preceding year. Of the

total, roughly 559 lakhs are now met from public funds (against 477 in the preceding

year), viz, 367 lakhs from provincial, 147

from district and 37 from municipal funds

contributed 185 lakhs

Among the larger provinces, the highest

expenditure was in Bengal, 220 lakhs

Principal developments—In the year 1912-13,

the following additional allotments from Imperial funds were announced for education in

provinces and politically administered areas—

319 lakhs non-recurring from the surplus revenue

of that year, and 55 lakhs recurring from the

revenue of the year 1913-14. The developments

of the five preceding years have been described

in the quinquennial review. Compared with

the figures for 1910-11, the increase during

the past two years in pupils of public institutions has amounted to 13 4 per cent and that

in expenditure to 25 5 per cent

Among special features of the period are the

establishment of a Faculty and the scheme

for a college of Commerce in the Bombay Uni-

versity. A generous gift of 10 lakhs to the

University of Calcutta was made by Dr Rash-

bihari Ghose. A committee worked out a

scheme for the Dacca University, a project

which has subsequently received the general

approval of the Secretary of State. The reports

on education in the various provinces show that

made more elastic and the amount given in other provinces improvements have been made in secondary education, and in the Bombay Presidency the pay of assistant teachers in Government secondary schools has been increased. The pay of primary school teachers has likewise been improved, in the Punjab, graded scales of salaries from Rs 12 to Rs 30 a month are being generally introduced, in Bihar and Orissa the stipend paid to aided school teachers have been regulated, in the Central Provinces a sum has been earmarked for rendering pensionable the pay of all masters drawing Rs 11 and over. Among developments in Muhammadan education the foundation of an Islamiya College at Peshawar has been conspicuous.

Recent Developments

Bihar and Orissa

arrangement of the provinces of Bengal and

now arrangement necessitated by the re-

tables differ from those given last year in the

It should be observed that the Statistical

of India published on the 22nd February 1913,

immediately preceding years have been describ-

The main developments of the last and of

important committees deliberated during the

of a Technological Institute in Calcutta. Other

Alhambra and other important subjects

Other features of the year have been the collection of materials for the preparation of extensive schemes for the spread of elementary education, and, in certain provinces, for the improvement of secondary education, the growth of new ideas regarding university teaching, which has resulted in the proposal for at teaching and residential university at Dacca and Benares and the establishment of Professorships, Readerships, and Lectureships in Universities like those of Calcutta and Bombay, the generous gifts of Sir T. N. Palt and Dr Rashbihari Ghose to the University of Calcutta, the creation of a department of industries at Aligarh as a portion of the scheme of industrial training and development, the sanctioning of an industrial scheme for the Central Provinces, the institution of a College of Commerce in Bombay, an inquiry carried out by Colonel Atkinson and Mr Dawson into the question of bringing technical institutions into closer touch with the employers for an Oriental Research Institute, and the conference held in July 1912 on the education of the domiciled community.

increase of those under instruction expansion in expenditure accompanied by an 65 lakhs was also made. There has been higher education, and a non-recurring grant of 10 lakhs was sanctioned for university and recurring grant of 50 lakhs a recurring grant of 50 lakhs to the Calcutta University. In addition to the graciously receiving an address presented by the Emperor in His Majesty the King-Emperor in expansion and improvement of education high expression of his hopes and wishes for the promotion of truly popular education, and the recurring Imperial grant of 50 lakhs for the national advancement, the announcement of a grant of the predominant claims of education of His Most Gracious Majesty the King-Emperor at the Imperial Durbar by command of India. The year, witnessed the which also laid down the policy of the Government of India published on the 22nd February 1913, of India published on the 22nd February 1913, immediately preceding years have been described. The main developments of the last and of

Statement of Educational Progress in BURMA

	1907-08	1908-09	1909-10	1910-11	1911-12	1912-13
Area in square miles	230,775	No change	230,775	230,775	230,775	230,775
Population	<ul style="list-style-type: none"> Male 11,111,111 Female 11,111,111 	11,111,111	11,111,111	11,111,111	11,111,111	11,111,111
Public Institutions for Males						
Number of arts colleges	1	1	1	1	1	1
Number of high schools*	11	11	11	11	11	11
Number of primary schools	5,261	5,261	5,261	5,261	5,261	5,261
Public Institutions for Females						
Number of arts colleges	148	148	148	148	148	148
Number of high schools*	8,893	8,893	8,893	8,893	8,893	8,893
Number of primary schools	130,087	130,087	130,087	130,087	130,087	130,087
Percentage of male scholars in public institutions to male population of school going age	24.1	24.1	24.1	24.1	24.1	24.1
Public Institutions for Females						
Number of arts colleges	9	9	9	9	9	9
Number of high schools	610	610	610	610	610	610
Number of primary schools	9	9	9	9	9	9
Female Scholars in Public Institutions						
In arts colleges	7	7	7	7	7	7
In high schools	1,083	1,083	1,083	1,083	1,083	1,083
In primary schools	55,006	55,006	55,006	55,006	55,006	55,006
Percentage of female scholars in public institutions to female population of school going age	9.1	9.1	9.1	9.1	9.1	9.1
Total Scholars in public institutions	192,628	192,628	192,628	192,628	192,628	192,628
Total Scholars (both male and female) in all institutions	70,358	70,358	70,358	70,358	70,358	70,358
From provincial revenues	262,080	262,080	262,080	262,080	262,080	262,080
From local funds	439,211	439,211	439,211	439,211	439,211	439,211
From municipal funds	17,45	17,45	17,45	17,45	17,45	17,45
Total Expenditure from public funds	3,71	3,71	3,71	3,71	3,71	3,71
From taxes	24,61	24,60	24,60	24,60	24,60	24,60
From other sources	10,32	10,32	10,32	10,32	10,32	10,32
GRAND TOTAL OF EXPENDITURE	4,48	4,44	4,44	4,44	4,44	4,44
	39,31	39,31	39,31	39,31	39,31	39,31

(a) Includes Rs 72,817 being provincial contribution to District Class Fund
(b) Includes Rs 57,772 being provincial contribution to Municipalities

* Include also vernacular high schools

14-00000



Statement of Educational Progress in the NORTH-1

	1908-09.	1909-10	1	1913-14
Area in square miles				
Population				
{ Male				
{ Female				
Total Population				
<i>Public Institutions for Males</i>				
Number of arts colleges	1	1	1	2
Number of high schools	12	12	12	14
Number of primary schools	254	267	264	440
<i>Male Scholars in Public Institutions</i>				
In arts colleges	22	19	22	77
In high schools	3,017	4,255	4,486	4,097
In primary schools	11,415	12,009	13,034	22,827
Percentage of male scholars in public institutions to male population of school going age	10.1	11.2	11.8	18.7
<i>Public Institutions for Females</i>				
Number of arts colleges				
Number of high schools	23	25	27	30
Number of primary schools				
<i>Female Scholars in Public Institutions</i>				
In arts colleges				
In high schools	1,301	1,576	1,776	2,239
In primary schools	1.1	1.3	1.4	1.7
Percentage of female scholars in public institutions to female population of school going age				
<i>Total SCHOLARS in public institutions</i>				
{ Male				
{ Female				
Total	17,659	19,589	20,019	33,124
<i>Total SCHOLARS (both male and female) in all institutions</i>	1,605	1,873	2,004	2,619
	19,255	21,462	21,012	35,743
	28,891	30,045	31,801	44,445
<i>Expenditure (in thousands of rupees)</i>				
From provincial revenues	*80	*58	*135	3.19
From local funds	83	91	92	2.17
From municipal funds	55	53	61	6.5
Total Expenditure from public funds	218	202	288	(u) 5.86
From fees	40	45	47	8.52
From other sources	61	65	63	9.38
GRAND TOTAL OF EXPENDITURE	3.19	3.12	3.88	10.26

* Imperial Revenues
† Including Rs 58,215 from Imperial Revenues

† Including Rs 2,60, 1,60 and 1,04 in thousands respectively from Imperial grants
(u) Including Rs 2,44 (in thousands) from Imperial grants

The Benares Hindu University.

Objects of the University.—These may be said to be as follows —

- 1 To promote the study of the Hindu Shastras and of Sanskrit literature generally, as a means of preserving and popularising the best thoughts and culture of the Hindus and all that was good and great in the ancient civilisation of India

- 2 To promote learning and research generally in arts and science in all branches technical and professional knowledge, combined with the necessary practical training, as is best calculated to promote indigenous industries and develop the material resources of the country
- 4 To promote the building up of character in youth by making religion and ethics an integral part of education

Proposed Faculties—In a letter to Sir Harcourt Butler the Maharaja Bahadur of Darbhanga has given an outline of the proposed faculties, which will be those of Oriental studies, Theology, Arts, Science (Pure and Applied) and Law. The main objects of the first named will be to foster the study of Sanskrit and its literature. It is proposed to place in charge of the work a European Sanskrit scholar who will be assisted by Indian professors and pandits of the old class. The faculties of Arts and Science will work for the present on the lines laid down by the existing universities. The study of some special branch of technical education will be best inaugurated under the heading Applied Science which will be expanded into a Faculty of Technology in due course. The Faculty of Law will specialise in the Hindu Law and its study from original sources. It is hoped also that in course of time there will be Faculties of Agriculture, Commerce, Medicine, Surgery and other branches of knowledge such as Music and the Fine Arts.

Proposed constitution—In July, 1914, Sir Harcourt Butler addressed a letter to the Maharaja of Darbhanga, in which he stated that the Government of India and the Secretary of State had come to the conclusion that the best form of constitution would be to constitute the Lieutenant-Governor of the United Provinces ex-officio Chancellor of the University with certain opportunities for giving advice and certain powers of intervention and control. "The Hindu University," he wrote, "though not empowered to withdraw colleges from outside will be Imperial in the sense that subject to regulations, it will admit students from all parts of India on the other hand it will be localised in or by Benares. There will be obvious advantages in having as Chancellor of the University the Lieutenant-Governor of the Province who is also Chancellor of the Allahabad University and who will be able to help to coordinate the work between the two, to secure them corresponding advantages and to foster a spirit of healthy co-operation. Moreover, such a constitution is in accord with the general policy of decentralisation which is now pursued by the Government of India."

There were originally three distinct movements in favour of founding a Central Hindu University. In the first place, in 1904, the Hon. Sardar Madan Mohan Malaviya made proposals which were confirmed and approved by the Sanatan Dharma Mahasabha or Congress of Hindu Religion which met at Allahabad in January 1906. About that time, Mrs. Annie Besant also put forward the idea of establishing a University at Benares and upon the third place, a number of Hindu gentlemen under the guidance of the Hon. Maharaja Sir Ramneshwar Singh Bahadur, K.C.I.E., of Darbhanga were considering the possibilities of starting an educational institution at Benares. The leaders of these movements soon recognised that a union of forces was essential, and in April 1911 Mrs. Besant and the Hon. Pandit Madan Mohan Malaviya met at Allahabad to consider possible lines of agreement. This meeting was followed shortly afterwards by another, when it was agreed that the first governing body should consist of representatives of the Hindu community, Mrs. Besant and representatives of trustees of the Central Hindu College and also that the Theological faculty should be entirely in the hands of Hindus. At the same time Mrs. Besant agreed to withdraw her petition for a charter which was then before the Secretary of State. At subsequent meetings presided over by the Maharaja Bahadur of Darbhanga a draft constitution was arranged and it was decided to wait upon the Hon. Member for Education and lay before him the provisional scheme. In the meantime, deputations for the collection of funds were instituted and these visited the leading centres in India. The result was most satisfactory. Amonree, big and small, were promised not only from India, but from Indians as far afield as Rome, Mauritius and South Africa, and besides Hindus of all denominations and stations in life, some Mahomedans, and a few Europeans, official as well as unofficial, have promised to contribute.

Government Approval—In October 1911, Sir Harcourt Butler wrote a very sympathetic letter signifying the approval of Government to the scheme and indicating the conditions laid down by the Government of India —

- 1 The Hindus should approach Government in a body, like the Mahomedans
- 2 A strong, efficient and financially sound college with an adequate European staff should be the basis of the scheme
- 3 The University should differ from existing Indian Universities by being a teaching and residential institution and by offering religious instruction
- 4 The movement should be entirely educational
- 5 There should be the same measure of Government supervision as in the case of the proposed University at Aligarh

It was subsequently added that a sum of Rs 50,00,000 must be collected, but the capitalised value of the properties transferred in trust and the perpetual grants made by the Maharajas of Jodhpur, Kashmir and Bikanir may be included

The powers which, in the opinion of Government, it is necessary to reserve to the Chancellor were enumerated. Some of these had been suggested by the University Committee, others were emergency powers which might never be exercised. The principle underlying them all is that, in the interests of the rising generation and the parents, the Government must be in co-operation with University and in a position to help it effectively and secure sound finance. The interest of the Government and the students and their parents in this matter are necessarily identical.

In concluding the letter referred to above, Mr Harcourt Butler said—"In order to meet the sentiment of the subscribers it has been decided that the University shall be called the Benares Hindu University. It will have no religious test and will be open to students of all denominations as well as Hindus. Hindu theological teaching and observances will not be compulsory for and but Hindus. It will also be a teaching and residential university. The terms mentioned above represent the conditions, the acceptance of which is a necessary precedent to the elaboration of any detailed scheme.

The Bill Passed

On the basis of these principles further discussion took place between the Education Member of the Government of India and the promoters of the University, and by degrees embodied in this agreement was introduced into the Imperial Legislative Council in 1915 and passed at the closing session of the Council. For a summary of this debate the reader is referred to the section which records the work of The Imperial Legislative Council (4).

The cardinal features of the Act are as follows—

It establishes and incorporates a teaching and residential Hindu University at Benares first of all, it creates a corporation sole of the University. The portals of the University are "open to persons of all classes, castes and creeds," but provision shall be made "for religious instruction and examination in Hindu religion only," this instruction is compulsory in the case of Hindus special arrangements are to be made for the religious instruction of Jains or Sikhs students.

of Jains or Sikhs students. The Governor-General of India for the time being shall be the time being of the United Provinces of Agra and Oudh shall be the Visitor, who has the power to inspect the University and its colleges, and to amend the proceedings of the University. It is they are found to be not in conformity with this Act, Statutes and Regulations. The authorities and Officers of the University are named to be (1) The Chancellor, (2) The Pro-Vice-Chancellor, (3) The Vice-Chancellor, (4) The Council, (5) The Senate, (6) The Syndicate, (7) The Registrar, and (11) The Treasurer. In administrative affairs, or the University, the Court is the supreme governing body and has the power to review the acts of the Senate. The Senate is the academic body of which the executive body of the Court is called the Syndicate. To meet the recurring charges, a permanent endowment of fifty lacs of rupees is to be made and invested in authorised securities. The degree, diploma, certificates and other academic distinctions granted by the University are to have the same recognition at the hands of Government as those granted by the existing Indian Universities. The formation and scope or statutes and Regulations of the University are provided with minute detail. The Government in Council has extensive power to act in cases of emergency, viz., the removal of any member of the teaching staff, the appointment of a certain examiner, and the raising of the scale of remuneration of the staff. The University grows out of the present Hindu University Society, which is now dissolved and all its property, rights, powers and privileges are to vest in the Benares Hindu University.

It will be seen from the above that the Act stipulates that the University shall commence with an endowment of fifty lacs of rupees sums aggregating approximately Rs 82 lakhs have been promised and Rs 50 lakhs paid. The Government of India have undertaken to make an annual contribution of a lakh of rupees. It is expected that the foundation stone of the new University buildings will be laid by the Viceroy in February 1916.

The Mahomedan University.

The movement in favour of transforming the Mahomedan Anglo-Oriental College at Aligarh into a teaching and residential University was started as early as the end of last century. It was hoped that the foundation of such an institution would awaken among Mahomedans the memory of their old seats of learning and prove an incentive to them in the future to regain the intellectual eminence from which they seem to have fallen of late years. Some time ago it was observed in a government report that the backwardness in education on the part of Mahomedans was due partly to poverty, partly to indifference and partly to their educational wants not being the same as those of the remainder of the population amongst whom they live. In this year's report, however, it is stated that a remarkable awakening on the part of Mahomedans in this direction has been witnessed during the last decade, when the total number of pupils under instruction in all classes of institutions rose by nearly 60 per cent. On the other hand in the matter of higher education their numbers remain well below that proportion notwithstanding the large relative increase. It was the aim of Sir Syed Ahmed Khan, K.C.S.I., years ago to place the benefits of a liberal education within the reach of the Mahomedan community and in 1875 a school was opened which three years later was converted into the Aligarh College. Under the inspiring influence of Mr. Beck and of Mr. (now Sir) Theodore Morrison great strides have been made. The college is now affiliated to the Allahabad University for the First Arts and B.A. for the B.Sc. in mathematics, chemistry and physics, for the M.Sc. in mathematics, and for the M.A. in English, Arabic, Persian, Sanskrit, History, Philosophy, Political Economy and Mathematics. The students of the college are also instructed in the theology and faith of Islam.

State of the Project.—His Highness the Aga Khan, the foremost Indian Mahomedan, had for some time been waiting until the time was ripe to make an appeal for funds for the University, which he had constantly held before his co-religionists as the educational goal towards which they should strive. He conceived that the moment had arrived in 1911, when His Majesty the King Emperor visited India to announce in person his coronation to his Indian people. As the result of a spirited appeal, followed by a very lively personal enquiry, His Highness was able to secure promises of aggregating some thirty lakhs or rupees. A draft constitution was drawn up and a consultative committee was formed. But the draft constitution was not approved by the Secretary of State, and on the question of the right of affiliation in particular there was a sharp difference of opinion. Government laid down, as in the case of the proposed Hindu University, that the new university should not have the power or affiliating Mahomedan institutions in other parts of India. Thereafter the project lapsed. In 1915, when the Hindu University movement crystallised in the Hindu University Act further steps were taken to come to an agreement with the Government of India. The Government however laid down at once that the principles governing the constitution of the Hindu University would be applied to all other institutions of like character, and that they were not prepared to consider any proposal, or to receive any disposition, which did not accept this governing rule. On October 15th, 1915, a meeting of the Mahomedan University Association was held at Aligarh, under the presidency of the Raja of Mahmudabad, when it was proposed that the meeting's recommendations to the Aligarh University Foundation Committee be the basis of the constitution of the Mahomedan University. The resolution was subsequently disputed and an official report of the proceedings was issued. It is evident that whatever transpired at the Aligarh meeting a large number of Indian Mahomedans are not prepared to accept a constitution for their University similar to that of the Hindu University, and that there is no prospect of agreement. Nor is there the slightest prospect of the Government or India agreeing to any markedly different constitution. The prospects of the University remain distant and therefore exceedingly remote, it is a curious sequel that the Hindu University which was a poor second in the field, should have received its Act and be proceeding with the necessary buildings which the Mahomedan University, long before, should be indignantly held up. It has been proposed that the interest on the funds subscribed should be devoted to other educational objects, such as scholarships, but this is opposed by some of the subscribers, who maintain that they subscribed to a University, and if the funds are not to be devoted to this purpose they should be returned to the donors.

The following is a list of the names of the persons who have been appointed to the various committees of the Board of Directors of the City of New York, for the year 1900.

Motnissal Municipalities—The total number of municipalities has altered little for many years past. New municipalities have been formed from time to time, but there have also been removals from the list. There was, indeed, a rather marked decrease according to the last decennial review (1902-12) and the number in 1911-12 was actually less than it was thirty years earlier. This result was brought about by the reduction to "unrigid areas" of a considerable number of the smaller municipalities in the Punjab and United Provinces. The figures showing the constitution of the municipalities call for little comment. Taking them as a whole the proportion of elected members was in 1911-12 rather more than a half, whereas in 1901-02 it was slightly less. The proportions of non-officials and Indians, already high in 1901, also increased during the decade. Elected members are in the majority in the cities of Bombay, Madras and Rangoon and in Bengal (excluding Calcutta), Bihar and Orissa, the United Provinces, and the Central Provinces, in the North-West Frontier Province and Baluchistan, on which and there are no elected members.

and in Burma they form a small minority. Non-officials outnumber officials everywhere, and Indians outnumber Europeans to an even greater degree, except in Rangoon. Taking the municipalities individually, some of the commissioners elected in the great majority of cases represent in the larger municipalities is in general by various classes of the community, or both. Voters must be residents not below a specified age, and property or status qualifications are generally laid down. The Chairman or President of the Municipal Corporation is sometimes nominated under the orders of the Local Government, but more often chosen by the commission from among themselves. The only provinces in which there has been in the past a large proportion of elected non-official chairmen are Madras, the Central Provinces, and the two Bengals, but Bombay has now to be added to the list. In view of the changes made that province in the closing years of the decade various provisions exist as to the exercise of powers by Government, particularly as regards maintenance and appointments. No loans can be raised without Government sanction, and alterations in municipal budgets, and alterations in taxation require the sanction of the Local

this Act and subsequent Provincial Acts a large number of municipalities was formed in all provinces. The Acts provided for the appointment of commissioners to manage municipal affairs, and authorised the levy of various taxes, but in most Provinces the commissioners were all nominated, and from the point of view of self-government, these Acts did not proceed far. It was not until 1870 that much progress was made. Lord Mayo's Government, in their Resolution of that year introducing the system of provincial finance, referred to the necessity of taking further steps to bring local interest and supervision to bear on the management of funds devoted to education, sanitation, medical charity, and local public works. New Provincial Acts were passed for the various Provinces between 1871 and 1874, which, among other things, extended the elective principle, but only in the Central Provinces was popular representation generally and successfully introduced. In 1881-2 Lord Ripon's Government issued orders which had the effect of greatly extending the principle of local self-government. Acts were passed in 1883-4 that greatly altered the constitution, powers, and functions of municipal bodies, a wide extension being given to the elective system, while independence and responsibility were conferred on the committees of many towns by permitting them to elect a private citizen as chairman. Arrangements were made also to increase municipal resources by placing under local management being transferred, with a proportional amount of provincial expenditure, for local objects. The general principles thus laid down have continued to govern the administration of municipalities down to the present day. In several Provinces there are, besides municipalities, "notified areas,"^{e, f, g} small towns which are not fit for full municipal institutions, but to which parts of the municipal Acts are applied, their affairs being administered by nominated committees. These are to be regarded as embryo municipalities.

Local Boards—The establishment of boards for dealing with local affairs in rural areas is a relatively recent development. No such boards existed in 1858, though some semi-voluntary funds for local improvements had been raised in Madras and Bombay, while in Bengal and the United Provinces consultative committees assisted the district officers in the management of lands devoted to local schools, roads and dispensaries. The system of raising cesses on land for purposes of this description was introduced by legislation in Madras and Bombay between 1865 and 1869, in the case of Bombay, normalised committees were to administer the proceeds for the cess. The year 1871 saw a wide development of legislation for local administrative purposes, partly due to growing needs, and partly the result of the financial decentralisation scheme of Lord Mayo's Government, providing for the levy of rates and the constitution of local bodies, in some cases with an election element, to administer the funds. The whole system was reorganised in accordance with the Order of Lord Ripon's Government. Under the Order of 1881-2 the existing local committees were to be replaced by a system of boards

other executive authority is vested in a separate officer, appointed by Government, usually from the ranks of the Indian Civil Service, styled the Municipal Commissioner, who can, however, be removed by a vote of 45 councillors.

Madras—A new Municipal Act for the City of Madras was passed in 1904. By this Act the number of the municipal commissioners, to whom as a body the name Corporation was now applied, was increased from 32 to 36, besides the President, and provision was made for the appointment of three commissioners each by the Madras Chamber of Commerce and the other associations, corporate bodies, or classes of persons, as the Local Government might direct, while the number to be elected as divisional elections was fixed at 20. Under the Act provisionally in force the total number of elected commissioners was not more than 24. The

DISTRICT AND LOCAL BOARDS

remaining commissioners were appointed, as they are under the new Act, by the Local Government, who also appoint the President. The Act of 1904 also introduced various other changes in the law which need not be specially noticed. It was modelled to a large extent on the Calcutta Act of 1890. Executive authority is vested in the President, who is removable under the existing law, by a vote of 28 commissioners. A standing Committee, consisting of the President and eight other commissioners, is mainly concerned with financial and building questions. The President, like the chief executive officers in Calcutta and Bombay, is usually a member of the Indian Civil Service. The number of persons enrolled as voters in 1911-12 was 9,824, rather more than 6 per cent of the total adult male population. The control of the Local Government over the municipality has hitherto been more stringent than in the other Presidency towns

The duties and functions assigned to the municipalities in urban areas are in rural areas entrusted to District and Local Boards. The systems of rural local government in the various provinces differ widely. The Madras organization, which provides for three grades of local boards, most nearly resembles the pattern set in the original orders. Throughout the greater part of that province important villages and groups of villages are organized as "Unions", each controlled by a PANCHAYAT. These bodies receive the proceeds of a light tax on houses, and spend them mainly on sanitation. Next come the Taluk Boards, which form the agency for local works in the administrative sections into which the districts are divided. Finally, there is the District Board, with general control over the local administration of the district. In Bombay there are only two classes of boards, for districts and TALUKAS respectively. In Bengal, the Punjab, and the North-West Frontier Province the law requires a District Board to be established in each district, but leaves the establishment of subordinate local boards to the discretion of the Local Government. The Bengal Act authorizes the establishment of Village Unions also, but this provision has not been very largely used. The United Provinces Act formerly in force directed the establishment of district and sub-district boards, but the latter were abolished, as mentioned below, in 1906. The system in the Central Provinces bears some resemblance to that which prevails in Madras, and the villages being aggregated into "circles", and the circles into "groups", each of which has a Local Board, while for each district there is a District Council having authority over the Local Boards in Assam district boards have not been introduced, and independent boards are established in each sub-division. Neither district nor sub-district boards exist in Burma, or in Baluchistan. District boards were started in Lower Burma in accordance with Lord Hordon's Local Self-Government Resolution of 1882, but the members took no active interest in them, and they died out after a few years. The district funds are now administered by the Deputy Commissioners of districts.

Sub-District Boards—The Decentralization Commission, having in view the admitted failure of sub-district boards as a whole, under existing arrangements, except in Madras and Assam, put forward proposals for making them the principal agencies of rural board administration by giving them independent resources, separate spheres of duty, and large responsibilities. Proposals for giving the district boards a larger measure of independence were also put forward.

Provision is made, on much the same lines as in the case of municipalities, for the exercise of control in certain directions by Government or its officers.

Work, and sanitation of the district boards, in regard to the less important roads, primary education, medical aid, and sanitation, subject to the general control of the district boards, with very limited powers and resources, but in Madras they exercise independent authority, subject to the general control of the district boards, in regard to the less important roads, primary education, medical aid, and sanitation.

Chairmen—The various Acts usually leave it to the Local Government to decide whether the Chairman of the district board shall be elected or nominated. In most provinces the Collector has, as a general rule, been appointed, though in the Central Provinces the President of the Local Government, was prescribed by the Act of 1906, but in practice the Collector is chosen as regards the subordinate boards, the law and practice vary. Generally speaking, the sub-district boards are on the footing of subordinate committees or agencies of the district boards, with very limited powers and resources, but in Madras they exercise independent authority, subject to the general control of the district boards, in regard to the less important roads, primary education, medical work, and sanitation.

111

Revenue and Expenditure.—The sources of income open to rural boards are much narrower and less elastic than those of the municipalities. The greater part of their revenue is derived from a cess which they are empowered to levy on the land, and which usually does not exceed one anna in the rupee on the annual rent value (or, in ryotwari provinces, the Government assessment). The cess is ordinarily collected by Government agency along with the land revenue, and varies in amount from the latter. Since 1905 the income derived from the land cess has been supplemented by a special Government contribution calculated at the rate of 25 per cent of that income. Substantial amounts, apart from this special contribution, are granted to the district boards by the Local Governments for various purposes apart from receipts in connection with their educational and medical institutions, and markets, the only other important sources or independent revenue are pounds and ferries, and, in Madras, road tolls. Except in Madras, the sub-district boards have generally no independent sources of income, and merely receive such moneys as the District Boards may allot to them. In Madras the Taluk Boards receive half the land cess levied in their areas, as well as certain miscellaneous revenues.

District and Local Boards—The following table shows the general constitution of the boards in each province, the figures in italics relating to local boards, the others to district boards. The figures are for 1911-14, save where otherwise stated.—

Province	Number of Bonds	Total Number of	By Appointment	Employment	By	By	By

[illegible]

POLICY OF GOVERNMENT DEFINED.

* Figures for 1912 1,

The Government of India issued on April 28th, 1915, a long resolution dealing with the growth and nature of local self-government in India. From what has gone before it will have been seen that the Decentralisation Commission made many and detailed recommendations on this question, and the intention of the resolution was to summarise policy on these points, as well as to complete the chain of decisions which commenced with the earlier resolutions. One might however to the wide diversity of conditions in India, and to the fact that local self-government must be a provincial question it was not apparently possible to lay down broad and simple principles as in the main the development of local self-government is a question of the provision of funds in the way of grants from the Imperial Exchequer, which is already overburdened. The Resolution was

[illegible]

Local Government Statistics

Municipalities - With this General Introduction we can now turn to the statistical results on the working of Local Self Government. The following table gives information as to the constitution of municipal committees, taxation, &c., in the chief provinces in 1913-14 (or 1912-13 where no later figures are available) -

	Population within Municipal Limits	Number of Municipalities	Total Number of Members	By Qualification		By Employment		By Race.		Incidence of Municipal Taxation per head.	
				Ex-Officio	Nominated	Elected	Officials	Non-Officials	Europeans		Indians
Presidency Towns											
Calcutta	889,067	1	50	—	25	25	4	46	10	31	5 0
Bombay	979,445	1	72	—	10	50	7	65	18	54	15 6
Madras	518,000	1	30	1	15	20	5	31	12	21	4 7
Bangalore	281,938	1	25	1	5	10	3	22	13	12	14 0
District Municipalities											
Madras	1,078,115	114	1,526	108	531	887	190	1,336	161	1,705	2 5
Bombay and Orissa	1,170,855	55	772	78	225	100	100	672	105	667	1 4
Assam	1,275,552	18	197	37	68	62	50	117	37	100	2 1
Bombay and Sind	2,751,932	158	2,310	187	830	913	157	1,673	137	1,903	3 3
Madras	2,090,585	62	901	77	302	102	137	824	110	815	2 0
United Provinces	4,000,000	86	4,164	93	211	577	175	1,000	131	1,047	2 5
Punjab	1,620,570	104	1,170	217	419	513	237	942	102	1,077	3 5
N. W. Frontier Province	141,028	6	119	16	83	15	10	53	18	101	4 1
United Provinces and Beluga	890,081	66	762	9	270	153	161	597	71	687	2 11
Bengal	689,770	11	503	181	252	97	198	302	160	460	3 2

* 1912-13.

Sanitation.

The history of the sanitary departments in India goes back for about fifty years. During that period great improvements have been effected in the sanitary condition of the towns, though much remains to be done, but the progress of rural sanitation which involves the health of the great bulk of the population has been slow, and incommensurate with the thought and labour bestowed on the subject. "The reason lies in the apathy of the people and the tenacity with which they cling to domestic customs injurious to health. While the inhabitants of the plains of India are on the whole distinguished for personal cleanliness, the sense of public cleanliness has ever been wanting. Great improvements have been effected in many places, but the village house is still often ill-ventilated and over-populated, the village site dirty, crowded with cattle, choked with rubbish, and the village tanks polluted, and used in vegetation, and poisoned by stagnant pools, and the village tanks polluted, and used indiscriminately for bathing, cooking and drinking. That the way to improvement lies through the education of the people has always been recognised."

Of recent years the pace has been speeded up as education progressed, education developed, and funds were available in a resolution issued in May 23rd, 1914, the Government of India summarised the position at that time, and laid down the general lines of advance. This resolution (Gazette of India, May 25th, 1914) should be studied by all who desire to understand the present position and policy. Its main features are summarised here.

"The governments in India have moved more rapidly of late. In 1898, the Government of India issued an important statement of policy. In 1908, imperial grants amounting to Rs 30,00,000 (£ 200,000) a year were made to local Governments. A new department of the Government of India was created in 1910 in order to relieve the Home Department of education, sanitation and some other branches of the administration. In addition to sanitary conferences held by local Governments, three All-India sanitary conferences were convened at Bombay, Madras and Lucknow, respectively, over which the Hon'ble Sir Harcourt Butler presided as Member of the Governor-General's Council in charge of the department concerned. These conferences were attended by non-officials as well as officials, by laymen as well as professional sanitarians. Again, the Indian Revenue and Sanitation Commission was set up in 1912. The Sanitation Commission was accorded constant touring. The organisation was accordingly modified in 1912. The Sanitation Commission is now the independent adviser to the Government of India in all technical and sanitary matters, but all questions of personnel as well as the administration of the bacteriological department and research generally have been placed under the control of the Director-General, Indian Medical Service, with the Sanitation Commission as his staff officer."

Organisation—As a result of the Plague Commission's Report Lord Curzon's Government took up with vigour the reorganisation of the sanitary department. Research institutes were started and an appointment of Sanitation Commissioners with the Government of India was created. The functions of this office were to advise the Government of India upon sanitary and bacteriological questions to settle with local Governments the principles on which an advance should be made and to organise and direct research throughout India. The arrangements were not completely successful. Among the disadvantages, the separation of research from clinical work deterred men from entering the department, and the office work in connection with research prevented the Sanitation Commissioner from undertaking wide and constant touring. The organisation was accordingly modified in 1912. The Sanitation Commission is now the independent adviser to the Government of India in all technical and sanitary matters, but all questions of personnel as well as the administration of the bacteriological department and research generally have been placed under the control of the Director-General, Indian Medical Service, with the Sanitation Commission as his staff officer."

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- The sanctioned strength of the superior sanitary organisation in India now is
- (a) A Sanitary Commissioner with the Government of India
- (b) A bacteriological department comprising—
- (i) thirteen laboratory appointments distributed as follows—
- Central Research Institute
Bombay Bacteriological Laboratory
King Institute of Preventive Medicine, Madras
Pasteur Institute, Kasauli
Pasteur Institute, Coonoor
- (ii) fifteen new appointments recently sanctioned for the prosecution of research work and direct investigation in the field
- 1 Director and 3 Assistants
1 Director and 2 Assistants
1 Director and 1 Assistant
1 Director and 1 Assistant
1 Director and 1 Assistant
1 Director and 1 Assistant

in practical hygiene and in the study of the bacteriology and etiology of tropical diseases. It is hoped in the near future to make arrangements in India for the former and to utilise the schools of tropical medicine at Calcutta and elsewhere for the latter. Meanwhile, a British diploma in public health is required from candidates for the post of Deputy Sanitary Commissioners and health officers of the first class. The problems of public health in India are vitally complicated by the fact that biting insects are a prominent factor in the dissemination of disease, and it is obviously desirable to provide in India, as soon as possible, a complete course of training for sanitary officers.

Training classes for sanitary inspectors are now held in all the more important provinces

Department of Public Health.—A substantial beginning has thus been made for the development of a department of public health and Indians have been freely enlisted for it. The posts of Deputy Sanitary Commissioners and health officers are now open to Indians. Nine Deputy Sanitary Commissioners out of 26 and the majority of health officers are Indians. The new bacteriological department consisting of 28 officers is also open to duly qualified Indians.

As health officers and Sanitary Engineers gradually relieve Deputy Sanitary Commissioners of much of the drudgery of inspection and routine work, it is hoped that the latter will be set free to deal with epidemics and communicable diseases from a higher plane, and to consider issues of public health wider than those which they are able to review to-day. It is therefore important to provide in advance free interchange between them, the laboratory workers and those carrying out practical research in the field.

Progress of Research.—Research is slowly lifting the veil which hides the secrets of disease and mortality and opening up fields of inquiry scarcely thought of a generation ago. The discovery by Sir Ronald Ross of the part played by the mosquito in the transmission of malaria and the appointment of the Plague Commission in 1898 are landmarks in the history of Indian Sanitation. In 1902, a research institute was founded at Gubindy in Madras, named the King Institute after Lieutenant-Colonel King, O I E, I M S, in view of his devoted efforts in the cause of sanitation in that presidency. In 1905 Lord Curzon's Government summed up the position and the policy of the Government of India in regard to the establishment of laboratories for the study of problems of public health in India. The functions of the central laboratory were originally research, the preparation of curative sera and the training of scientific workers. The functions of the provincial laboratories were diagnosis and special research connected with local conditions. This policy has been steadily developed. The Central Research Institute has been established at Kasauli. The Plague Research Laboratory at Pune has been extended and re-equipped and is now the bacteriological laboratory for the Bombay Presidency, and a school of tropical medicine. A research laboratory and school of tropical medicine are under construction at Calcutta. Pasteur Institutes

Bests the routine work connected with the bacteriological diagnosis of disease, and the manufacture of various vaccines and sera and general research, these laboratories at different times have been the centres of many special investigations, notable amongst which are those on plague and enteric fever. It is hoped that before long each province in India will have a laboratory fully equipped for research.

Research Fund Association.—The foundation of the Indian Research Fund Association in 1911 has marked an important era in sanitary progress. The control and management of the association are vested in a governing body, the president of which is the Member in charge of the Education Department of the Government of India. The governing body is assisted by a scientific advisory board, of which not less than three members have seats on the governing body. They examine all proposals for work in connection with the scientific objects of the association and report as to their importance and feasibility. The members of this board are appointed for one year, but are eligible for re-election, and they have power to add to their number. The present members are the Director-General, Indian Medical Service, the Sanitary Commissioner with the Government of India, the Director of the Central Research Institute at Kasauli, the Officer in charge of the Central Medical Bureau and the Assistant Director-General, Indian Medical Service (Sanitary). Sir Ronald Ross has been elected an honorary consulting member. The membership of the Indian Research Fund Association is open to non-officials. Every donor of Rs. 5,000 is entitled to become a permanent member, while every subscriber of Rs. 100 per annum can be a temporary member. Members of the association are entitled to attend and take part in the annual general meeting of the association and to receive copies of the reports and other publications issued from time to time by the association. Although, so far, the fund has been financed solely by the Government of India, it is hoped that in time Indian philanthropists will contribute towards the expansion of the association by founding chairs of research by financing experimental research measures and otherwise.

Work of the Association.—The association has been active and can already point to some achievement. Out of an income of Rs. 15 lakhs (£1,00,000) received since its incorporation and up to the end of 1913-14, an expenditure of over Rs. 14 lakhs (£93,383) has been sanctioned. In 1911, Major S. P. James, I M S, was deputed to study yellow fever in its endemic area and to draw up proposals for protecting India against the introduction of the disease. Those proposals are still under consideration. In the meanwhile, serogonoma surveys have been carried out in Calcutta, Bombay, Madras, Ranchi and Rangoon and other seaports. Anti-malaria schemes based on preliminary surveys have been carried out at a cost of Rs. 9,02,000 (£50,133). Investigations are at pre-

sent in progress into the problems connected with the prevalence of cholera, dysentery, leprosy and gonorrhoea, as well as inquiries into the plasmicology of cholerae derivatives, the use of hydroxy-methyl-urea as a disinfectant and the bacteriology of bacillary dysentery. Other investigations are under consideration regarding bacteriological standards of purity for milk and milk products. The bacteriology of water filtration and salt removal best suited to Indian conditions, and the ecology of dipterous and other flies of short duration of life, will be started so soon as more trained research workers are available. It is hoped also to carry out, during the next non epidemic season, an experiment in plague prevention on a large scale.

Besides financing the investigations conducted by its own staff, the association gives grants-in-aid to outside research on approved lines. The co-operation of other workers has been sought, and every encouragement has been given to them. Grants for research have been made, for instance, to Professor Macdonald, Dr. Hoesack and Dr. Howitt. The services of Indians have also been enlisted. Dr. Korke is engaged in an important investigation into leprosy, while Mr. Wait, a medical entomologist, is employed under the association. The Government of India cordially approve the policy of encouraging private enterprise in the cause of research.

The association has also started a journal for the publication of medical research work done in India—the "INDIAN JOURNAL OF MEDICAL RESEARCH"—published quarterly. The favourable reception which has been accorded to the first three numbers is evidence of the interest that is being taken in sanitary science in India to day.

The investigations enumerated above represent the work directly under the supervision of the Government of India. The local Governments also are fully alive to the importance of research, and in seven provinces special officers are at present engaged in investigating the causes underlying the local prevalence of malaria and dysentery. Suitable schemes for the mitigation of that disease.

Water Supply—Few subjects have received more attention or late than the provision of a piped supply of filtered water in towns. Complete figures are not available but sums amounting to at least Rs. 3,51,58,297 (52,343,888) have been spent during the last 20 years on completed schemes. Projects costing Rs. 1,10,03,433 (1,79,03,562) are under construction and projects costing Rs. 1,14,41,750 (5,76,92,983) have been prepared and sanctioned. These figures are exclusively of the expenditure in the Presidency towns and Kangoon.

Drainage—Drainage schemes on modern lines, are the basis of all sanitary improvement in urban areas. The demand for them is steadily on the increase. As in the case of water supply complete figures are not available but the known expenditure during the last twenty years has been considerable and is now rapidly increasing. The expenditure on completed works outside the Presidency towns and Kangoon

during that period amounted to Rs. 97,65,490 (1,63,10,000), whereas the cost of the works under construction is estimated at Rs. 1,54,20,502 (2,41,02,88,033). In the beginning prevalence over drainage was given to piped water supply but experience has demonstrated the advantage of introducing both concurrently. Without drainage there is no means of carrying off the surplus water and without piped water-supply it is difficult to flush the drains properly.

When drainage schemes on modern lines were first started in this country, there seems to have been a bias against the use of sewers, and, wherever possible, open drains were adopted. Experience has shown that the preference for the open drain and the fear that sewers would give excessive trouble were not well founded. On the contrary, much of the advantage of a drainage system is lost if only open drains are used, as the old system of hand-carrying latrines has to be continued. Moreover, economy in establishment is possible only in the case of a sewage system.

Pilgrimages—Pilgrimages necessitating as they do the collection of large numbers of persons, often more than a million, at one place at one time have an important sanitary aspect mainly in connection with cholera, and other communicable diseases. The Government of India recently decided to examine the sanitary arrangements at the chief places of pilgrimage throughout India and local Governments were asked to appoint provincial committees for this purpose under the presidency of the Sanitary Commissioner with a view to the Government of India already made a grant of Rs. 2 lakhs of Rs. 1,39,333 (2,78,666) and promised an additional grant of 4 lakhs of rupees (5,20,000) for the pilgrims route to Badrinath, and they have made a further recurring grant of Rs. 20,000 (51,333) a year for the same object. The importance of pilgrimages to the Hedjaz by Indian Musulmans is undergoing close scrutiny. The Government in Council anticipates that the inquiries will lead to significant sanitary improvement and promote the convenience and comfort of many millions of His Majesty's loyal Indian subjects.

Rural Sanitation—The following observations are based on practical experience of rural sanitation —

- (a) Travelling dispensaries may be used to spread a knowledge of the simple facts regarding the more common diseases. For this purpose the sub-assistant surgeons in charge should be given a special training in hygiene. Once they become known to the people as healers of the sick their advice is readily accepted.
- (b) The improvement of the village water-supply is as important as it is difficult. Apparently, excellent results have been obtained by disinfection of the water with permanganate of potash.

Province	Birth Rates (per mille)		Death Rates (per mille)					
	1912	1913	1912		1913		1913	
			Urban	Rural	Urban	Rural	Urban	Total
Total	38 95	39 3	38 1	29 4	29 7	31 0	28 5	28 7
Delhi	35 3	44 8	43 7	33 0	39 3	44 2	35 1	40 0
Bengal	35 3	33 7	24 5	30 1	29 8	24 9	29 7	29 4
Bihar and Orissa	42 5	42 1	30 0	31 0	31 0	27 4	29 2	29 1
Assam	32 2	33 1	20 8	25 1	25 0	21 2	27 8	27 7
United Provinces	45 4	47 7	34 4	29 6	29 9	39 4	34 6	34 8
Punjab	45 3	45 4	31 9	26 1	26 6	35 7	29 7	30 2
N W Frontier Pro-	37 1	36 2	22 7	23 5	23 4	24 3	24 7	24 7
Central Provinces and	48 2	49 3	47 6	41 8	42 3	30 9	30 2	30 3
Berar	30 9	32 2	28 6	23 8	24 3	26 2	20 8	21 4
Madras	26 32	25 9	64 1	36 8	38 4	47 6	32 6	33 5
Coorg	35 0	35 0	41 5	33 8	34 9	32 9	25 4	26 7
Bombay	31 7	31 7	37 2	24 4	26 0	32 9	22 2	23 6
Burma Lower	33 0	34 2	44 1	27 5	29 0	39 3	26 5	27 6
Burma Upper	47 08	43 2			38 3		25 9	25 9
Ajmer-Merwara								

The most striking feature was the diminished death-rate in the Central Provinces where cholera and malaria had prevailed in 1912, and in Bombay where cholera showed a marked decrease. The increased death-rate in the United Provinces and the Punjab was due chiefly to "fevers" which is attributed to the rise in prices.

The excess of births over deaths ranged from 19 per mille in the Central Provinces to 4 per mille in Bengal. The mean percentage of male to female births ranged from 126.5 in the North-West Frontier Province to 104 in Bihar and Orissa.

The greatest mortality occurred in December, while the lowest was in February. Infantile mortality was highest among the major provinces in Upper Burma, the Central Provinces, and the United Provinces, the total rate per mille for all India was 192 male and 197 female, strenuous efforts are being made to reduce these figures which, though still excessive, show a welcome decrease.

Birth and Death Rates—The population of the areas in which births and deaths were registered was 238,823,365, according to the census of 1911, and the number of births registered in 1913 was 39 37 per mille, compared with 38 95 per mille in 1912, and an average of 38 37 per mille in the five years 1908-12. The total number of deaths was 6845,018=28 72 per mille, as compared with 29 71 per mille in 1912 and 32 77 for the five years 1907-11. This was the lowest rate since 1898. The rates for the provinces are given in the following table —

- (a) Village midwives are, in some districts, encouraged by small grants of money and rewards to attend at the head-quarters hospital for a short and simple inquiry regarding sanitary work.
- (b) In several provinces, notably in Madras, village unions or circles have been formed and their committees entrusted with small grants for the improvement of the sanitation of the village site. This measure might be extended experimentally elsewhere. It is calculated to encourage discussion and inquiry regarding sanitary work.
- (c) In most districts in India, the civil surgeon is also in theory the sanitary officer of the district. His duties at head-quarters, however, do not allow him to tour and inspect in the district to the extent that is necessary, even in the case of epidemics in the district. It is sometimes not possible for him to leave headquarters, in some provinces, district sanitary officers have been appointed and there can be little doubt that many more such appointments are required and that one of the most urgent and hopeful measures for promoting rural sanitation is the appointment of well qualified and whole-time district health officers to control and organise all sanitary arrangements and experiments in the district.
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These measures open up possibilities with reference to a reduction in infantile mortality and children's diseases generally.

Urban Vital Statistics.—The following table gives the ratio of deaths per mille in cities of British India whose population exceeded 150,000 in 1911.—

Death Rate per Mille	1908-12 (Mean Rate)		Death Rate per Mille	1908-12 (Mean Rate)	
	1908-12	(Mean Rate)		1908-12	(Mean Rate)

Calcutta	40.0	43.7*
Bombay	38.1	33.7
Madras	33.1	29.0
Delhi	32.7	29.2
Lahore	32.7	29.2
Cantonment	40.6	40.1
Agartala	47.0	47.0
Amritsar	39.4	39.4
Almora	30.3	30.3
Amritsar	50.9	50.9

Chief Diseases.—There are three main classes of fatal disease: specific fevers, diseases affecting the alimentary organs, and lung diseases. Infectious and skin parasites, ulcers and other disorders of the skin, and to insidious habits and surroundings. The table below shows the number of deaths from each of the principal diseases recorded in British India and the death rates per 1,000, during the three years from 1911 to 1913.

Years	Small pox	Cholera	Fevers	Dysentery and Diarrhoea	Plague	Respiratory Diseases
1911	58,538	354,005	4,207,356	253,636	733,582	223,822
1912	89,337	407,769	3,936,083	292,216	263,037	247,736
1913	98,135	294,815	3,983,112	246,578	198,456	237,229

With regard to special diseases cholera is much less prevalent than formerly. In 1913-14 it occurred chiefly in Bengal and Bihar and Orissa. Plague forms the subject of a separate section. When reference is made to "fever" in India, malarial fever is generally understood, but many causes of death and many diseases much more fatal than malarial fever are included under the heading. The fever death rates, as usual, varied greatly, ranging from 2.3 in Bengal to 6.7 in Madras. The malarial section of the Indian Association is housed at Kasauli, but has a field laboratory in Delhi where classes are held. In 1913, 58 doctors underwent instruction at these classes. Anti-malarial operations have been proposed to send a small detachment to study anti-malarial measures in Italy. The means adopted to fight malarial are the sale of quinine at cheap rates and the extermination of mosquitoes by such methods as drainage, petting and jungle clearing.

Vaccination.—The total number of vaccinations performed among the civil population during 1913-14 was 9,872,086, being a slight decrease from the previous year's work. Of primary vaccinations 96.95 per cent, and of re-vaccinations 69.66 per cent, were successful, about 86.19 per cent of the population were successfully vaccinated. The number of infants successfully vaccinated was 46.83 per cent of the number under a year old. Arm-to-arm vaccination has or will shortly have, their own call lymph depots.

Plague.—The present epidemic of plague in India first broke out at Bombay in August 1896, and as the table below shows, it has been responsible for a heavy rate of mortality since that date. In 1907 the deaths from plague attained the highest total yet recorded, viz, 1,315,892, for India as a whole, the number in British India alone being 1,166,223, or 5.18 per mille. In 1908 the mortality declined enormously falling to 156,880, the lowest total since 1900. In 1909 there was once more a relatively low mortality, viz, 178,808 deaths, or fewer than in any year since 1900, excepting 1908. In 1910 and 1911 there was a severe recurrence, especially in Bengal, the United Provinces, and the Punjab. In the latter part of 1911 and in 1912 the virulence of the epidemic abated, and the 1913 figures show a still further fall. In 1914 there was a rise, owing to a recurrence of the disease in Bombay, and in 1915 there has been a serious recurrence in the Punjab.

Plague is so local in its visitations that all general and unanalysed statistics are likely to prove misleading. Many parts of India have been almost entirely free from its ravages, and in the greater part of the country the outbreaks cannot be described as having been acute or disastrous. On the other hand, general statistics tend to conceal the severity of the distress caused by the disease in particular districts. In some parts of the Punjab and the United Provinces the mortality has been especially severe.

1896-97	57,543	1907	1,115,892
1898	116,285	1908	156,480
1899	139,009	1909	178,808
1900	92,807	1910	512,005
1901	282,027	1911	846,875
1902	676,365	1912	306,488
1903	883,076	1913	217,869
1904	1,143,993	1914	295,897*
1905	1,069,140	* Preliminary figure	
1906	356,721		

The reasons for this uneven incidence are at present somewhat obscure. The mortality in Eastern Bengal and in Assam has been at no time appreciable largely, it is believed, because the habits of the people and the structure of their houses are unfavourable to the breeding of rats while in the Madras Presidency and in Burma the epidemic has never reached serious dimensions. How far the comparative immunity of Madras is due to a policy of segregation and surveillance and how far to climatic conditions is undecided.

The Advisory Committee on Plague Investigation in England and the Plague Commission in India, whose constitution has been described in former issues of this Report, have concluded their investigations, which have led to most important results. The main facts in regard to the mode of propagation of an epidemic and the life history of the plague bacillus have been ascertained and rational methods of attack have thus been in all possible. It is now generally agreed (1) that epidemic bubonic plague in man is directly dependent on epidemic plague in rats (2) that the vehicle of contagion between rat and man is the plague-infected rat-flea, and (3) that bubonic plague is not directly infectious from man to man, and (4) that the life of the plague bacillus outside the bodies of men, animals, or fleas is of short duration. In large towns plague may persist through the year, but in villages such persistence is exceptional, and the recurrence of an epidemic is probably due to fresh infection.

In the light of the knowledge and experience now acquired it is possible to deal satisfactorily with the disease when effective control can be established over the sanitary conditions, and in the case of the native army and in limited areas such as jails there has been remarkable success. But attempts to establish such control over large towns would involve too great an interference with the habits, prejudices, and sentiments of the people, and the application of measures of proved utility must depend upon the particular circumstances of each locality and upon the character of its inhabitants. In the face of great practical obstacles, three principal measures for combating plague are now adopted—

(1) The temporary evacuation of quarters in which plague is prevalent
 (2) Inoculation with the prophylactic fluid
 (3) The systematic destruction of rats

Hospitals, Dispensaries, Asylums—The following table gives figures for Indian hospitals under three heads. The institutions grouped under Heads (1) and (3) are, generally speaking, servants, policemen, &c. —

—	(1) Civil Hospitals and Dispensaries (State Public, Local Fund and Private aided)	No of Institutions	No of In-patients	No of Out-patients	(2) State Special and Railway Hospitals	No of Institutions	No of In-patients	No of Out-patients	(3) Private Non-aided Institutions	No of Institutions	No of In-patients	No of Out-patients
1912	2,733	492,798	28,956	768	826	53,350	98,171	2,331,069	669	51,709	4,774,387	4,828,357
1913	2,820	516,062	30,032	517	851	98,171	2,331,069	697	57,252	4,828,357	4,828,357	4,828,357

Lunatic Asylums—The treatment of lunatics at asylums prevails on only a small scale in India, where insanity is less prevalent than in European countries. The census of 1911 showed an increase of nearly 22 per cent in the number of insane since 1901. The number admitted into asylums in 1913 was 2,827 as against 1,931 in 1912. The total asylum population of the year was 8,472. A new asylum has been opened in Bombay.

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the irritation prevents sleep, interferes with digestion and so promotes diarrhoea, so that this simple malarial may be the starting point of a dangerous illness. Planned next to the skin should be avoided in the hot weather as it is so liable to start the irritation. A good lotion consists of two teaspoonfuls of lead-decoction in four ounces of a 1 in 2000 solution of perchloride of mercury, dabbed on the skin and allowed to dry. Equal parts of boracic acid powder and talc to avoid the heat the European flies to the punkah. The electric punkah has been one of the greatest blessings introduced during recent years in Indian towns as its use insures a good night's rest in place of the weary hours of sleeplessness which formerly worried the temper and the mental energy of the European during the hottest months. Still this blessing is not without its attendant dangers. Almost common are attacks of muscular rheumatism, sudden internal chills causing diarrhoea, attacks of colic, ordinary nasal catarrh, and sometimes bronchitis or pneumonia. The electric punkah does away with the mosquito, which does not conduce to the free circulation of air, and gives good ventilation in its place.

Finally, we have the effects of a continued high temperature on the working of the nervous system. As has been remarked by the late Lt-Col Crombie, F.R.S., (in a valuable paper on "The measure of physical fitness for life in the Tropics," to which the writer is much indebted), "In the tropics there is going on continually and unconsciously a tax on the nervous system which is absent in temperate climates. The nervous system, especially those parts of it which regulate the temperature of the body, are always on the strain, and the result is that in time it suffers from more or less exhaustion." The mean temperature of a European in India is always about half a degree higher than it is in a temperate climate, and it may be raised to 99° or 100° after severe bodily exertion. When, under the strain of a severe hot moist and sultry season, the heat gives out, or as it is said is "inhibited," we have all the serious phenomena of HEAT STROKE. But in the less marked but long

MALARIA.

Attacks of malaria, dysentery, and enteric represent the principal risks to the European travelling in India. Malaria is the commonest cause of fever in the tropics and subtropics, but the risks therefrom have been greatly diminished by our complete knowledge of its causation which now permits an intelligent prophylaxis, that is, taking adequate precautions against infection. The connection of certain kinds of fever with marshy soils has been recognised from ancient times, whence its old name of paludism, and the word "malaria" itself implies the belief in the existence of an emanation of poisonous air from the water-logged ground. It is now realised that the poison is conveyed solely by mosquitoes, and by the anopheline species. There are only a few of the many anophelines which carry malaria, but all are to be regarded as dangerous. The parasite of malaria is a delicate jelly-red colouring-matter of the blood-cell. The result of the destruction by the parasite of the red corpuscles is represented by the granules present in the plasma showing minute granules of dark pigment in their substance. These bodies are contained in bodies composed of delicate protozoa some of the red corpuscles will be found to him under a high power of the microscope, mealy of the attack, and examined in a thin smear of the shivering-fit which marks the commencement before the occurrence of the "rigor." If the blood of a patient be taken about an hour before the sexual cycle is prepared for in the blood of the human host.

The blood of the human host is quite (exogenous and sexual) But the first part of the sexual cycle is prepared for in the blood of the human host (endogenous and sexual), the other in the stomach and tissues of the mosquito. The blood of the human host (endogenous and sexual), the other in the stomach and tissues of the mosquito. The blood of the human host (endogenous and sexual), the other in the stomach and tissues of the mosquito.

But there are other Indian risks, and these are most likely to affect travellers, due to the effects of heat on food. Microbes multiply with profusion in milk, and decomposition is liable to occur in meat within a very short time after killing. Milk should always be boiled, and owing to the dirt in railway dining-rooms, and in many hotels, and the carelessness of the lower type of native servant employed there, it would be better to rely on tinned milk or on a supply of Horlick's milk tablets, when travelling long journeys by rail and in the smaller towns. Beef should never be eaten in a tropical source of large worms in India. There is also liability to contamination of food by flies and dust. Indian cooks, though among the best, have little regard for sanitation, and consequently the state of the cook-house should be carefully supervised.



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DYSENTERY

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The first of these is the fact that the majority of cases which are referred to the court are cases of "simple" insanity, in which the defendant is suffering from a mental disease which is not of a dangerous character. In such cases the court is usually satisfied that the defendant is not a danger to the community, and it is therefore possible to order that the defendant be committed to a mental hospital for treatment. The second of these is the fact that the majority of cases are cases of "insane automatism," in which the defendant is suffering from a mental disease which is not of a dangerous character. In such cases the court is usually satisfied that the defendant is not a danger to the community, and it is therefore possible to order that the defendant be committed to a mental hospital for treatment. The third of these is the fact that the majority of cases are cases of "insane automatism," in which the defendant is suffering from a mental disease which is not of a dangerous character. In such cases the court is usually satisfied that the defendant is not a danger to the community, and it is therefore possible to order that the defendant be committed to a mental hospital for treatment.

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abscesses, boils, attacks of heart failure or of paralysis, or ulcers of the leg, all with infection of the whole globe and consequent loss of sight. Some recover with permanent mental impairment, or persistent tremors of the limbs with difficulty in speaking with clearness.

Septicæmic Plague

This term is applied to certain forms of acute plague where buboes do not form, or where there is uniform but slight enlargement of glands in various parts of the body with symptoms of a general blood infection. The term is misapplied, inasmuch as most cases of bubonic plague are really septicæmic from the outset. These cases are either acute, ending fatally about the third day or sooner or are sub-acute with symptoms simulating typhoid fever, ending fatally in about a fortnight. In the acute cases large dusky patches of blood effusions beneath the skin, the so-called plague spots, are sometimes found, and there may be hæmorrhages from the stomach or bowels.

Pneumonic Plague

In this variety the plague bacillus proliferates in the lung and causes rapid consolidation of large patches of the lung tissue scattered irregularly throughout the organs with a considerable amount of œdema, so that the lungs are engorged with blood and large and heavy, and the bronchial tubes filled with reddish frothy sputum.

Dengue fever, otherwise known as Dandy fever or Breakbone fever, is rather common in India and is generally present in the larger towns, but as it appears in manifold forms and various ways described it differently, its identity is not always recognised, and, therefore, by many medical men is thought to be less common than it really is. On occasions it gives rise to very wide-spread epidemics. In 1902 there was an extensive epidemic on the eastern side of the Indian Peninsula, and quite recently there has been a bad outbreak in Calcutta. It is more common during the rainy season. The onset is abrupt, with fever, slight sore throat producing cough, rapidity of the pulse, sometimes a red rash which is so fugitive that it is often overlooked, and intense pain. These pains consist of the patient's chief complaint, small of the back, or in some of the joints either large or small. Sometimes there is no complaint of pain in the limbs, but there is intense pain behind the eyes. The fever lasts for three or four days, during which in rare cases there may be further symptoms due to the appearance of pleurisy or even a pericarditis. Sometimes there is intense shooting pain into the little finger. Though the intensity of the symptoms may give a very serious aspect to the case, yet a fatal issue is almost unknown. After the four days of intense suffering the fever subsides somewhat, but the patient is left with the appearance of a malarial fever, and that this poison may give a very serious aspect to the case, the pits of a mosquito, and that this poison is believed that the poison is conveyed by from influenza until the appearance of the rash. It is often impossible to distinguish the malarial fever from influenza which are analogous to the virus of Yellow Fever.

CHOLERA

This is one of the most important diseases of India, having been endemic therein for many hundreds of years. It is always present in the community, and sometimes causes over large districts generally from some crowded centre such as the site of a pilgrim, from which it is disseminated. In 1911 numbered three hundred and fifty-four thousand and in the following year four hundred and seven thousand. The disease is of special importance for the numerous

Treatment of the Disease

No serum or injection has so far proved of value in diminishing the mortality of the sick. Much can, however, be done by medical treatment. Absolutely rest is required and the patient should not even be allowed to sit up in bed. Drugs which act as heart stimulants are required almost from the outset, and irregularly these have to be administered by the skin as well as the mouth. The buboes should be fomented till they soften and incised as soon as fluid is formed. For the pneumonic condition the administration of oxygen gas gives relief. This can be obtained in India without much difficulty. Careful nursing is essential, and should be obtained in India without much difficulty. Careful nursing is essential, and should be obtained in India without much difficulty.

organisms develop outside the human host as they seldom come up to standard quality, and he adds "The few drugs that are not indigenous to India could easily be made to grow in some part or other of this vast land. The great advantage accruing from the systematic cultivation of drugs is that a regular supply of genuine drugs of standard quality is assured. The variation in the quality of wild-grown drugs is sometimes a very serious drawback to finding a profitable market for them. The quality of *Podophyllum Emodi* growing wild in India is an illustration in point. This plant was discovered by Sir George Watt in the year 1888, and it has been shown to be identical with the American drug that is being employed for pharmaceutical purposes, it still remains unrecognized by the British Pharmacopoeia, which, as explained by the "Chemist and Druggist," some time ago, is solely due to the uncertainty which still exists as to its physiological activity."

DRUG CULTURE.

Two monographs on the cultivation of drugs in India, by Mr David Hooper, of the Indian Museum, Calcutta, and by Mr Purn Singh, of the Indian Forest Department, Dehra Dun, have lately been published. Mr Hooper, in his paper, states that one-half of the drugs in the British Pharmacopoeia are indigenous to the East Indies, and nearly the whole of the rest could be cultivated or exploited. The following are given as those that could be grown in quantity and as worthy of the attention of cultivators and capitalists —

Belladonna, most of which is still imported, grows well in the Western Himalayas from Simla to Kashmir, the Indian-grown plant containing 0.4 to 0.45 per cent of alkaloid

Digitalis is quite acclimatized on the Nilgiris, growing there without any attention. The Madras Store Department obtains all its requirements from Ootacamund, and the leaf has been found equally active to that grown in England.

Henbane is a native of the temperate Himalayas from 8,000 to 11,000 ft. It was introduced into the Botanic Gardens, Saharanpur, in 1840, and it has been steadily cultivated there up to the present time, and the products supplied to medical depots satisfy the annual demand. Ipecacuanha has been raised with a small measure of success in the hilly parts of India, and it only requires care and attention to raise it in sufficient amount to make it commercially remunerative.

Jalap root grows as easily as potatoes in the Nilgiris, and there is no reason why the Medical Stores of Bengal, Bombay and Madras should not be obtained from Ootacamund. Mr Purn Singh discussed the subject in a number of the "Indian Forester" in 1914. He states that most of the drugs in the British Pharmacopoeia grow wild in India, and that there is already a large export trade for some of them. He adds, however, that materials collected at

Mr Singh also points out that the Indian consumers of medicine depend mostly on herbs growing wild in the forests, the more important of these probably numbering at least 1,000. This inland trade is very large, the possibilities in the Punjab alone being put at Rs 50,00,000. He mentions saffron, liquorice, and saip as products exotic to India, whose cultivation in this country looks full of promise. Mr Singh suggests that a complete survey be made of the extent of the inland trade in medicinal products found growing wild in Indian forests in order to arrive at the figures of annual consumption, and that the forest areas where the most important drugs grow should be preserved. Inquiries should be instituted as to the best methods of cultivation, and if need be, the means of extending the artificial propagation. It is to provide data to induce the private capitalists to embark on such enterprises that Mr Singh advocates the formation of some body to go into the matter. He suggests that India is well worthy of attention by those in this country who are interested in extending the culture

of drugs in the British Empire. The Forest Department has already begun the cultivation of Indian podophyllum-root in the Punjab, United Provinces and the North-Western Frontier and several kinds of dried rhizome are sold annually for local consumption. Mr Hooper also shows that a start has been made in regard to the cultivation of belladonna, henbane and digitalis. One of the principal difficulties to be overcome is to ensure a ready market, and there is also always the danger of overproduction to be considered.

Essential Oils.

SANDALWOOD OIL is, by far the most important perfume product of India. The sandalwood tree is a root parasite, obtaining its nourishment from the roots of other trees by means of suckers. It grows best in loose volcanic soil mixed with rocks, and preferably in character although in rich soil it grows more luxuriantly, less scented wood is formed, and at an altitude of 700 feet it is said to be totally devoid of scent. The best yield of oil is obtained from trees growing at an altitude of 1,500 to 4,000 feet, but the tree requires plenty of room so as to enable it to select vigorous hosts to feed it.

PALMAROSA OIL, also known as Indian geranium oil or "Turkish geranium oil" is another of the principal perfume products of India. It is derived from the grass, *Cymbopogon Martinii*, which is widely distributed in India, where it is known as "Mojra". Gingergrass is an oil of inferior quality, possibly derived from older grasses or from a different variety or the same species. Both oils contain geraniol, the proportion in palmarosa being from 75 to 95 per cent and in gingergrass generally less than 70 per cent. These oils are used in soap, perfumery, and for scenting hair oils and pomades. *LEMONGRASS* OIL is derived from *Cymbopogon citratus* and *Cymbopogon flexuosus*. The former is a native of Bengal, and is largely cultivated all over India, but the oil distilled on the Malabar Coast and Cochin is derived principally from *C. flexuosus*.

PEPPER, OR PIS-CUS, is a perennial grass, *Piperia zizanioides*, found along the Comandul Coast and in Mysore, Bengal and Burma, in most heavy soil along the banks of rivers. The leaves are practically odorless and only used for thatching and weaving purposes. The roots are used in perfumery and in the manufacture of mats and baskets.

THE MALABAR CARDAMOM, *Pipturus cardamomum*, is the source of the seeds official in British and other Pharmacopoeias. Cardamom oil of commerce is, however, not distilled from this variety on account of the high price, but is obtained almost exclusively from the long cardamom found growing wild and cultivated in Ceylon. The oil is used medicinally as a cathartic and is also employed by perfumers in France and America. *COSTUS* ROOT (the root of *Stemona lappa*) is a native of Kashmir, where about 2,000,000 lbs are collected annually. It is exported in large quantities to China where it is used for incense. It is also used to protect shawls and

Nagai camphor used in China for ritualistic and medicinal purposes. This shrubby composite is found in the Himalayas and is indigenous to India. It is widely distributed in India and is used by the natives against flies and other insects.

ECUATYRS plantations are situated chiefly in the neighbourhood of Ootacamund, Coonoor, and Wellington, at elevations varying from 5,500 to 8,400 feet, the best being at from 7,200 to 8,000 feet. The climate of this region is fairly cool, equable and moist, with a well distributed rainfall of about 50 to 80 inches, although frosts occur, the winters are mild on the whole, and snow is unknown. The soil, a red clay overlying gneissose rock, is rich and deep in some parts, shallow and poorer in others. A large factory is being built for the distillation of eucalyptus oil at Ootacamund. It is believed there is a considerable supply of the leaves is available

Manufacture of Quinine

Government Cinchona plantations were started in India in 1862 from seed introduced by Sir Clements Markham from South America, of which the plant is a native. There are two main centres, Darjeeling and the Nilgiri Hills. In both localities a portion of the area is owned by tea or coffee planters, and the bark they produce is either sold to the Government or exported. Several species of cinchona are cultivated in India, namely, *Cinchona succirubra* (red bark), *C. calisaya* and *C. ledgeriana*, and in southern India *C. officinalis* (yellow bark), and *C. officinalis* (crown bark). The commonest species in Darjeeling is *C. ledgeriana*, and in southern India *C. officinalis*. A hybrid form is also largely grown and yields a good bark. At the Government factories both cinchona leafing and quinine are made. Thanks to these factories, practically no quinine is nowadays imported for Government purposes.

THE REPORT OF THE GOVERNMENT CINCHONA PLANTATIONS AND FACTORY IN BENGAL published in July, 1915, shows a remarkable record of progress achieved since the Department was re-organized ten years ago. In 1905 the maximum annual yield from bark on the plantation fell short by 6,000 lbs of the annual demand which then stood at 15,000 lbs. To-day the output of the factory is 30,000 lbs of quinine possible, and on occasions the actual, annual output of the factory is 30,000 lbs of quinine. On the whole plantation the net area under cinchona has increased from 1,737 acres to 2,552 acres. The annual possible harvest has increased from about 200,000 lbs of 2.5 per cent bark to 1,000,000 lbs of 4.5 per cent bark, and this quantity is assured for many years to come. The extraordinary efficiency of the factory plant has been rated from not more than 70 per cent to 95 per cent of the possible, the manufactured cost of quinine has been reduced from Rs 9 to 1-1-10. One of the most interesting measures of the people of India has been Sir George Kings

Engineer's Survey.

The Trust perceived at once that the problem of providing improved traffic facilities for Calcutta and its suburbs must be dealt with as a single problem and by a single mind. The first duty set by the Trust to their chief engineer was, therefore, to prepare a scheme of main roads of primary importance. The chief engineer Mr. L. F. Richards, M.O.B., &c., devoted his whole attention to this task and his report was issued early in 1914. Mr. Richards' report, which was accompanied by maps and numerous photographic illustrations, made a volume of 400 closely printed foolscap pages. He found Calcutta "a city which is in a very much more than ordinary bad way", and early discovered the serious fact that "the Calcutta Improvement Act of 1911 was almost useless for the great task set to the Trust". The Trust, was not content to sit under a Town Planning Act but only under a local Housing Act, so that "Calcutta situated under a Town Planning Act but only under a local Housing Act, so that "Calcutta set to the Trust". The Trust, was not content to sit under a Town Planning Act but only under a local Housing Act, so that "Calcutta situated under a Town Planning Act but only under a local Housing Act, so that "Calcutta set to the Trust".

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part of the members being nominated by Government and others elected by local bodies whose interests are most nearly concerned.

The following are the present Board of Trustees—The Hon'ble Mr. C. H. Bonpas, I.C.S., Chairman. The Hon'ble Mr. C. F. Rayne, I.C.S., Chairman of the Calcutta Municipal Corporation (*ex-officio*), The Hon'ble Mr. R. Rescoe Case, Law, O.B., elected by the Corporation, The Hon'ble Rai Radha Charn Pal, Bahadur, elected by the Ward Commissioners, Dr. Charles Banks, elected by the Commission-ers appointed under Sec 8 (2) of the Calcutta Municipal Act, 1899, Mr. W. K. Dods, elected by the Bengal Chamber of Commerce, The Hon'ble Rai Sitamath Rai Bahadur, elected by the Bengal National Chamber of Commerce, Sir H. N. Mukherjee, K.O.B., Mr. F. H. Stewart, O.B., the Hon'ble Mr. J. Hillary and Mr. R. Anderson, appointed by the Bengal Government.

The Board and their Work.

It was impossible to settle in advance the exact projects to be undertaken by the Trust. All details of these were, therefore, left to be worked out by the Trust after its constitution, Government exercising control by having all the individual schemes sent to them for approval before execution. The Trust did not enter on a virgin field. The Municipal Corporation had previously dealt in some measure with the problems they were appointed to solve and the Trust started work with the initial benefit of this previous labour. Thus, the Corporation had aligned many roads and this work was useful to the Trust, though in some cases modifications were necessary.

The work upon which the Trust are now definitely embarked may be divided into three classes as follows—

Many parts of Calcutta are over-crowded with buildings and ill-provided with roads. These areas are to be re-arranged both on the ground of sanitation and for convenience of traffic.

Population will continue to throng into the over-crowded parts unless it can live on the outskirts and at the same time have speedy access to the business centres of the town. Quick traffic can only take place along broad roads. These are already wanting in Calcutta. The construction of broad roads will at the same time ventilate the over-crowded parts of the town and it has been recognised from the outset that the construction of broad roads running both north and south and east and west will thus secure a double object.

There is the question of providing for the population displaced by improvements, and still more important of providing for the natural growth of population by laying-out roads and building sites on sparsely populated areas on the outskirts of the town. When persons of the working class are displaced or likely to be displaced the Trust can build dwellings for them if private enterprise does not undertake the work.

Income

Year	Rs
1908-09	1,20,16,030
1909-10	1,18,36,518
1910-11	1,23,26,171
1911-12	1,33,90,409
1912-13	1,42,46,17
1913-14	1,51,28,435
1914-15	1,41,30,809

The figures of income do not however indicate fully the expansion that has taken place in the operations of the Trust, because since the year 1902-03 up to the time of the present war the Commissioners reduced their rates and charges at various times

The expenditure during the last official year amounted to Rs 1,51,28,435. This is Rs 13 lakhs less than in the preceding year.

The decrease in traffic in the port arising out of the war affected the revenue of the Trust to an average extent of about Rs 2 lakhs a month and in January, 1915 the Commissioners resorted to emergency measures of taxation to meet the situation.

Various considerable improvements for the expansion of the port have recently been carried out to provide for the growth of trade. An important project recently undertaken was one for the lighting of the lower reaches of the Hughli with a view to their navigation by night. Considerable progress has been made with a new scheme for the extension of the docks. A special committee was appointed in England in 1913, to visit and inspect British and Continental ports with a view to advising the Commissioners in the light of the latest experience there on various points connected with new works.

But these undertakings only belong to the outskirts of the main problem. The remedial measures of the Port Trust have proved beneficial, but they are insufficient to meet the ever-increasing requirements of trade. The question of the congestion at the Calcutta jetties and the absence of adequate transport facilities for the present volume of trade, has been engaging the attention of Government for some considerable time past. There has been a very great increase in the trade of the port and a large increase in the number and tonnage of vessels entering it, and the lack of sufficient accommodation has resulted in serious delays to vessels and consequent loss, chiefly arising from the inadequacy of facilities for the discharge of cargo at the jetties.

The Government of Bengal, in December 1913, appointed a Committee to investigate the important questions represented by the problem of the future development of the port. The Committee consisted of the Hon. Sir William Duke, Chairman, Sir Henry Burt, the Hon. Mr. A. M. Montagu, the Hon. Mr. J. C. Shorrock, the Hon. Raja Hrishkish Lekha, Mr. A. G. Lyster, and Mr. H. E. Howard, Secretary.

The Committee was empowered to—
(1) examine the existing traffic and port facilities in Calcutta and its immediate neighbourhood,
(2) investigate the present and future requirements of the trade of Calcutta, and
(3) determine the extent to which the various transport agencies shall provide new works and other facilities in order that these requirements may be fully met for as long a period as it is reasonable to prepare a forecast.

The Bengal Government, in an explanatory announcement, agreed "that the subject for consideration is one of wider range than an enquiry into the facilities afforded to the import trade at the jetties, and that it concerns rather the question whether proper facilities of all kinds are being provided to enable the port and railway authorities to deal promptly and adequately with the rapidly expanding trade of Calcutta in accordance with a well defined and carefully-though out policy. There are several projects for improving transport facilities and the railway and other approaches to the port, which have been prepared at various times and which are now under consideration, such as the provision of new coal-beds on the Howrah side of the Hughli, the Grand Trunk Canal Project, the removal of the Ichahola jute mart and additions to the jetties. These projects are of the first importance and involve enormous expenditure and they should be rightly held, be examined and co-ordinated by a committee whose duty it would be to make an exhaustive enquiry into the requirements of the trade of the port and the means by which these requirements could be met."

The Committee's report was published in March 1914. It approved of the new scheme already undertaken by the Port Commissioners for the extension of the docks saying "we are of opinion that the general layout of the scheme is suitable, and that it will ensure an ample margin for the expansion of trade which is likely to take place in any period that can reasonably be foreseen." The Committee said that "the main criticism to which the conduct of the Port Affairs is open is that the inception of these schemes was delayed until the great increase of trade during the last two years has shown only too conclusively how urgent they were required."

At the same time, the Committee recognised the immense services rendered to the Port by the late Sir Fredrick Dumaque, during his tenure of office as Vice Chairman of the Port Commissioners, stating that the schemes of extension recommended were initiated under his auspices and that their inception is now possible is due to his foresight and to his grasp of the situation.

The Committee considered that the future expansion of the seaboard trade of Calcutta should take place in the neighbourhood of the docks. Their principal conclusions, in addition to their approval of the dock extension scheme, may be summarised as follows. A standing advisory Committee should be appointed in reference to the railway approaches and lay-out of the siding accommodation for the new dock system.

an enormous monopoly as the control of the harbour front. These were resolved in 1860 given to Messrs Price, Willis & Reeves in 1903. The dock is oblong in shape, with two days at the north end. The total area of the wet basin is 45.2 acres, the length of quays, including the harbour wall, nearly three miles. There are 17 berths 500 ft in length. These berths are equipped with hydraulic cranes and transits shed accommodation varying from 3 stowed sheds 400 ft long by 120 ft wide, to single stowed sheds 400 ft long by 100 ft wide. Railway sidings run between the quays and the sheds, also behind the sheds. On the harbour wall there is a quay 3,000 ft long, equipped with hydraulic cranes and transits. The north end of this quay is intended for a troopship berth. Hydraulic power is used for working the cranes, dock gates, machinery, transits, shed lifts, capstans, etc. A floating crane to lift 160 tons forms part of the equipment of the dock. The dock entrance is through a lock on the south-west, parallel to which runs the new dry dock, a thousand feet long, a hundred feet wide, and with a sill thirty-four and a quarter feet below high water.

Ordinary neat tides

Outside the dock, beyond the entrance lock runs the new mole, a continuation of the south-west wall, alongside which ocean steamers may embark and disembark, their passengers direct from the shore, thus dispensing with the tediousness of the tender. In the immediate vicinity of the landing pier, a Customs house, refreshment and waiting rooms, post and telegraph offices and every facility the traveller can require are under construction.

The small Canac basin, immediately north of the new dock and formerly used by country craft, has been filled in, thus enabling a canal to be cut from the northern extremity of Alexandra Dock, and extending to Victoria Dock. The width of the canal will be 80 ft. Four berths will be provided to permit ships to lie at the wharves on either bank. The waterway will enable ships to be taken to any part of the Bombay dock area through the Alexandra Dock entrance. This will probably lead to the closing of the old dock entrance, with the result that ships will be saved much interference in handling and the Port Trust will be relieved of the necessity of expensive dredging operations.

The railway sidings and series of transit sheds in the new dock were planned according to the most modern principles of dock management.

The Sewri reclamation will chiefly be utilised for the accommodation of the export trade of cotton grain and seeds, which form the largest item in the traffic of the port. The old cotton green—or market—as situated at Colaba, at the extreme southern end of the port and has long been greatly overcrowded, besides encroaching on the end of the port. The new cotton green and godowns on the reclamation will cover about 166 acres, with 182½ acres available for future extension. The present greens and godowns at Colaba occupy 60 acres. Unloading sidings with accommodation for 700 wagons are to be provided, in addition to ample running lines, as compared with sidings to hold 154 wagons at Colaba at present.

Government purchased in 1870, on behalf of the Trust, the private forshore owners' rights, at a cost of Rs 75 lakhs, and at the same time reconstituted the Trust on a basis on which it has worked exceedingly well until the present day. The late King Emperor Edward VII, during his visit to Bombay in 1875, laid the foundation stone of the first large dock, which has since been known as Prince's Dock. This was opened in 1880, and thereafter the financial difficulties hitherto experienced by the Port Trust disappeared. The construction of the Victoria Dock followed and recent years have provided an unbroken succession of surplus receipts into the treasury of the Port. Out of these profits charges on trade have been reduced wherever they pressed and the financial position of the Trust has greatly been strengthened by the building up of a large revenue, by the institution of sinking funds for the repayment of the whole of the existing debt and by liberal appropriations to depreciation accounts.

The trade of the port rapidly outgrew the accommodation provided at Prince's and Victoria Docks. The developments now in progress are the result and are estimated to provide for the requirements of the Port for another 20 years, or longer. The new schemes may be divided into four heads.

(a) The construction of the Alexandra Wet Dock and Hughes Dry Dock, of which His Majesty The King Emperor laid the foundation stone during his visit to Bombay as Prince of Wales in 1905. His Excellency the Viceroy with Her Excellency Lady Harrington, performed the opening ceremony in March, 1914.

(b) The reclamation for the development of Port facilities of 583 acres, with a wharf of some 4½ miles in length—an addition of 1,000 acres to the area of the city—at Mazgaon and Sewri, beyond the present Docks at the extreme north of the harbour.

(c) The building of a new railway leading from the main lines of the G. I. P. and B. & C. I., outside the city, to the Docks, in order to provide for more expeditious handling of heavy railborne traffic, and

(d) The construction of a complete bulk oil installation at Sewri, at the north of the docks, with a deep-water pier.

The total estimated cost of the new docks, with a deep-water pier

and its equipment is Rs 6,15,05,409 or, say, £4,100,365, cost of the Port Trust Railway installation, 22½ lakhs (£17,500), and of the reclamation and contingent works, Rs 388 lakhs, or, say, £2,580,086.

The above mentioned property was sold at public sale on the 1st day of January 1891, at the residence of the said John W. Smith, for the sum of \$100.00, to the said John W. Smith, who is the owner of the same. The said property was sold subject to the payment of the said mortgage, and the said John W. Smith is bound to pay the same to the said mortgagee, as soon as the same shall be demanded.

MADRAS.

The Port of Mahanagar is the largest and the most important port in the district. It is situated on the west coast of India, in the Gulf of Cambay. The port is a natural harbour, and is one of the best in the world. It is the only port in the district which is open to the sea all the year round. The port is situated on the west coast of India, in the Gulf of Cambay. The port is a natural harbour, and is one of the best in the world. It is the only port in the district which is open to the sea all the year round.

[illegible]

Besides hitting the B I S S Chupra Fort in the harbour building damaged by shell fire were repaired at a cost of Rs 6,720. The Churma of the company, at a meeting on this 11th day of the month, it was decided that their building factory and other buildings were damaged, the loss has been stated by the shareholders, to have amounted to Rs 5,120.

RANGOON

The personnel of the Commissioners for the port of Rangoon is comprised of the following thirteen members—
 Appointed by Government—Mr George Cunningham Buchanan, B. C. I., M. Inst. C. E. (Chairman), Mr James Algonson Stevens (Chief Collector of Customs, Burma), Mr William Henry Taitton (Commissioner of Police, Rangoon), Commander Seymour Douglas, Valie, R. I. M. (Principal Port Officer, Burma), Mr William Henry Lawson (Deputy B. I. C. S. (President), Rangoon Municipal Committee), the Hon. Mr Arthur William Rammie, M. P. Philip Henry Brown and Mr Henry Britton Hindleston.
 Elected by the Burma Chamber of Commerce—Messrs John Henry Polson (1st Chairman), Daniel Robertson, Walter Buchanan and John Moff.
 Blotted by the Rangoon Trades Association—Mr Maurice Oppenheim.
 Officers of the Port—
 Secretary—Mr J. G. Jones (on leave).
 Resident Engineer—Mr J. L. Johnson.
 Executive Engineer (River Conservation)—Mr E. C. Niven.
 Deputy Conservator—Mr H. C. Ashton (on leave). Mr H. N. Gilchrist (officiating).
 Traffic Manager—Mr E. H. Keeling (on leave).
 Chief Accountant—Mr D. H. James.
 The receipts and expenditure on revenue account of the port of Rangoon in 1913-14 were as follows—

Receipts	Expenditure
Rs 43,38,270	Rs 41,84,473

The capital debt of the port fund at the end of the year was Rs 2,61,34,622.

The total value of the trade of the port during the year was Rs 4,730,43 lakhs, as compared

CHITTAGONG.

It has been recommended that this port may be made over to the Assam-Bengal Railway and that funds required for its improvement should be provided by the Government of India out of their railway budgets. This proposal has the support of the Bengal Government and a report on the matter has been submitted to the Secretary of State. The Acting Agent of the Assam-Bengal Railway points out in this report that "however valuable the Port of Chittagong might be to the Assam, most careful consideration that the sum of over a crore of rupees already spent upon this port should be added to the Assam-Bengal Railway capital since to do so would mean the further putting back of the prospect of imports in the same year was Rs 4,730,43 lakhs, as compared with Rs 5,570 lakhs in the preceding year.

The total imports (landed or sent inland in river craft) from foreign vessels amounted to 1,018,845 tons. Goods landed from vessels arriving from European ports and elsewhere outside India declined by 10 per cent and the number of steamships declined by 10 per cent. The total number of steamships and sailing vessels for the port was 1,231 (excluding Government vessels) with a total net tonnage of 2,11,110, being a decrease of 10 per cent over the previous year.

There took place on the 17th January, 1914, the inauguration of the recently completed river training works, rendered necessary by the erosion of the right bank of the Rangoon river above the town to such extent as to threaten the permanent diversion of the main stream from the Rangoon foreport and the consequent formation of a sandbank in front of the whole of the port mouth. The works comprised a training wall 10,000 ft long and the dredging of a channel through the shoal in front of the wall. It is calculated that 99 per cent of the river is brought under control. One and a half million tons of granite were used in the work. The wall was practically completed in one year and nine months before the estimated and the erosion of the right bank has ceased. The revised estimate for the complete work is Rs 138 lakhs, against the sanctioned estimate of Rs 150 lakhs. The cost is borne by a grant of Rs 50 lakhs from the Government and Rs 88 lakhs from the raising of port debentures. The work being non-revenue-producing, imposes a burden of some Rs 5 lakhs on the trade of the port.

Sir George Buchanan, in December 1913, proceeded to Basra, to advise the Government of India as to improvements at the mouth of the Shatt-el-Arab and elsewhere in that region.

Chittagong, in Eastern Bengal, on the right bank of the Karanaphuli river 12 miles from its mouth, was already an important place of trade in the sixteenth century when the Portuguese merchants gave it the name of Porto Grande. The construction of the Assam-Bengal Railway has made it the natural outlet for the trade of Assam and part of Eastern Bengal. The chief business is the export of jute, which is baled by steamers to Chandpur and raised to Chittagong or dispatched direct in brigs to other ports. Piecegoods, salt and kerosene oil are imported, and rice tea and hides are the principal exports. The total value of the exports in 1913-14 was Rs 2,32,483 and the total value of the imports in the same year was Rs 4,730,43 lakhs.

This Bill will pay dividends. He argues, therefore, that the Government or India should take upon itself the whole of the responsibility of the expenditure required, which, he thinks, not in that of the Assam-Bengal Railway and should be included in a separate account and the capital cost of the railway minimal facilities as that the capital of the Port, together with proving the port. The procedure, he suggests, might rightly be done in view of the intervention that should be derived from India at which time companies are at present being managed in the same way.

VIZAGAPATAM HARBOR PROJECT.

The question of a harbour at Vizagapatnam to supply the large area of territory under development and with suitable access to the outside world has been lately brought to the fore through a report by the Bengal Nagpur Railway Company by their consulting engineer—Sir John Wolfe Barry and partner. This report, which was based on personal inspection upholds the practicality of creating at no very extravagant cost, an inland harbour to which access would be maintained by two breakwaters projecting into the sea and by dredging a channel to the depth (in the first instance) of 24 feet. A deeper draft would be provided 1,500 feet in length with a possibility of supplying further accommodation in the future. It is understood that the question is meeting with sympathetic consideration on the part of the Indian Government though some doubt seems to exist as to the best measures for the furtherance of the object in view. I have the pleasure of sending you a pamphlet dealing with the subject of the port would give a beneficial influence on the development of a large area in East Central India seems unquestioned. It is pointed out that Vizagapatnam being as it does in front of the only practicable gap in the barrier of the Eastern Ghats is formed by nature to be the outlet of the Central Provinces from which considerable amount of trade has taken this route in the past, even with the imperfect communications hitherto available. A necessary complement of the scheme would be the construction of the proposed railway by Barakapuram to Rajapur which with the existing coast line of the Bengal Nagpur Railway would make a water and rail communication to the proposed port and obviate the long and expensive circuit by Chhindwa. I think would also be supplied in the most direct route to Khamzom from Europe by way of Bombay while from an important point of view the possible protection of stretch of coast between Colombo and Calcutta is held to be a consideration of great importance. The latter proposition is pointed out other facilities for this purpose, and it also plays an important part in throwing the strain on the country current out to sea and checking the formation of a bar at Vizagapatnam. The total value of the export from this port in 1917-18 was £295,263; and of the import—£1,293.

BOY SCOUTS

The Boy Scouts' movement, initiated in England by Lt-Gen Sir Robert Baden-Powell (the Chief Scout), has spread widely in India, and the Boy Scouts Association has received the patronage of the Viceroy and the heads of the local governments. The aim of the Association is to develop good citizenship among boys by forming their character—training them in habits of observation, obedience and self-reliance—encouraging local activities and thoughtfulness for others—and rendering services useful to the public and handicrafts useful to themselves.

The *Boy Scouts' Gazette of India* published monthly, is the official organ of the Movement in India and in it are noticed all official notices and orders issued by the Indian Headquarters. It is obtainable from the General Secretariat, Subscription Rs. 2-3-0 per annum.

The following division of sources of the Indian Headquarters is officially published for information—The Assistant Chief Commissioner deals with all matters of Organisations and discipline including the issue of Warrants to new Local Associations and Officers, also the registration of new troops which should be applied for on Form C obtainable from the General Secretariat. Recommendations for awards of Life Saving Medals and Certificates should be made to him and also all applications for exemption from the swimming test for Class (Regulation 21) and all correspondence on the subject of Challenge Troops. Correspondence on the above subjects should be addressed to him at Fort William, Calcutta, by Local Secretaries, direct through the District and Provincial Commissioners where they exist. The General Secretary (Captain T. H. Baker, Railway Road, Bangalore), deals with

Famine.

India there is now no such a thing as a food famine, the country always produces enough food for the whole of the population, and the task of the State is confined to providing the means for those afflicted by drought to earn enough to buy food. The machinery whereby this is done will be examined after we have seen the experiences through which it was evolved.

History of recent famines

The Orissa famine of 1862-67 may be taken as the starting point, because that induced the first great and organised effort to combat distress through State agency. It affected 180,000 square miles and 47,500,000 people. The Bengal Government was a little slow in appreciating the need for action, but later food was poured into the district in prodigious quantities. Thirty-two million units were relieved (a unit is one person supported for one day) at a cost of Rs 95 lakhs. The mortality was very heavy, and it is estimated that a million people, or one-third of the population in Orissa alone, died in 1866, and the famine introduced India to the great migration from Marwar, which was such a distinguishing feature of the famine of 1896-1900, it is estimated that out of a total population of a million and a half in Marwar, one million emigrated. There was famine in Behar in 1873-74, then came the great South Indian famine of 1876-78. This afflicted Madras, Mysore, and in the second year extended to parts of the Central and United Provinces and to a small tract in the Punjab. The total area affected was 257,000 square miles and the population 58,500,000. Warned by the excessive expenditure in Behar and actuated by the desire to secure economy, the Government relief programme was not entirely successful. The excess mortality in this famine is said to have been 6,250,000 in British territory alone. Throughout British India 700,000,000 units were relieved at a cost of Rs 84 crores. Charitable contributions from Great Britain and the Colonies aggregated Rs 84 lakhs.

The Famine Codes.

The experiences of this famine showed the necessity of placing relief on an organised basis. The first great Famine Commission which sat under the presidency of Sir Richard Strachey, elaborated the Famine Codes, which aimed to meet later experience, form the basis of the famine relief system to-day. They recommended (1) that employment should be given on the relief works to the able-bodied, at a wage sufficient for support, on the condition of performing a suitable task, and (2) that gratuitous relief should be given in their villages or in poor houses to those who are unable to work. They recommended that the food supply should be left to private agencies, except where that was unequal to the demands upon it. They advised that the land-owning classes should be assisted by loans, and by general suspensions of revenue in proportion to the crop failure. In sending a provisional

Famine in India is the inevitable accompaniment of economic conditions which leave the bulk of the people dependent on the soil for their means of livelihood. It is intensified, because the produce of the soil over the greater part of India is dependent on a short rainy season, and the rains are erratic and subject to violent fluctuations. It falls with exceptional severity on India because the soil is divided into a multitude of petty holdings, titled by people without any capital, living for the most part from hand to mouth, and amongst whom credit ceases to exist as soon as the rains fall. In other agricultural countries there are good seasons and bad, but there is none other, with the possible exception of China, where in a famine year millions of acres may not yield so much as a blade of grass, except under artificial irrigation. The conclusion to be drawn from these conditions is that for many years to come India must be susceptible to famine. The shock of famine may be mitigated by the spread of railways, by the development of irrigation, the growth of manufacturing industry, and the improvement of rural credit. There is evidence that all these forces are tending greatly to reduce the social and economic disturbance caused by a failure of the rains. But they cannot entirely remove it.

Famine under Native Rule

At one time there was a general tendency to attribute famine in India entirely to the effect of British rule. In the golden age of India, we were told—whenever it may have been famine was unknown. But India had been drained of its resources of food by the railways, the people had been impoverished by the land revenue demand, and the country as a whole had been rendered less capable of meeting a failure of rains by the "Drain." These fallacies have disappeared under the inexorable logic of facts. A better knowledge of Indian history has shown that famines were frequent under Native rule, and frequent when they came. "In 1630," says Sir William Hunter, in the History of British India, "a calamity fell upon Gujarat which enables us to realise the terrible meaning of the word famine in India under Native rule. Whole cities and districts were left bare of inhabitants." In 1631 a Dutch merchant reported that only eleven of the 260 families at Svally survived. He found the road thence to Surat covered with bodies, decaying on the highway where they died, there being none to bury them. In Surat, that great and crowded city, he could hardly see any living persons, but the corpses at the corner of the streets lie twenty together, nobody buying them. Thirty thousand had perished in the town alone. Famine followed." Further historical evidence was adduced by Sir Theodore Morrison, in his volume on the Economic Transition of India. The "Drain" theory has been exploded. It has come to be seen that whilst railways have checked the old-established practice of storing grain in the villages, they have made the reserves, where they exist, available for the whole of India. In

Three points soon emerged from the year—the people showed greater resistance to their improvement in economic condition, they met the emergency with wonder, and courage, and resource, and the application of the relief program brought the numbers on public works within manageable proportions and induced the speedy return of the people to their normal occupations when the present or doubtful rains in 1911 enabled agricultural operations to be generally resumed.

The Indian Famine Trust

Outside the Government programme there is always scope for private philanthropy, especially in the provision of clothes, help for the superior class poor who cannot accept Government aid, and in assisting in the rehabilitation of the cultivators when the rains break. At every great famine large sums have been subscribed, particularly in the United Kingdom, for this purpose, and in 1899-1900 the people of the United States gave generously help with the idea of providing a permanent famine fund, the Maharaja of Jaipur gave in 1900 a sum of Rs 10 lakhs, in Government securities, to be held in trust for the relief of the needy in time of famine. This Trust has now swollen to Rs 28 lakhs, chiefly from gifts by the royal donors. It is vested in trustees drawn from all parts of India, and is freely used in an emergency. Substantial grants were given for the Bombay relief fund in 1917, and for the relief of the distress in Ahmednagar (Bombay Decan) in 1912. The report of the Trust for 1914 states that towards the end of December 1913 the Government of the United Provinces applied for a preliminary grant-in-aid of Rs 50,000 with the object of alleviating the distress caused by the unavoidable nature of the monsoon. The application was considered and sanctioned at the meeting held on the 12th January. In March, the Local Government applied for an additional grant of Rs 50,000 which they proposed to utilise in supplying extra comforts to afflicted persons, especially children, and for the issue of clothing to destitute persons in poor houses and on relief works and at the meeting held on the 20th April this was sanctioned. To meet the second grant the Board found it necessary to sell Government investments for Rs 1,400 out of the temporary

Famine Protection

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The statement showing details of the investment of the Trust as at 31st December 1914 stands to the credit of the Government Securities (charitable) Endowments as in the previous year it is Rs 28,10,000, Government Securities are of two classes, productive and protective productive works being estimated to yield Rs 7,02,000 in 1913 at Rs 11,744-8-8 leaving a balance of Rs 1,400 leaving a balance of Rs 6,00,000. This at the close of the year of Rs 6,00,000 leaving a balance of Rs 1,400 leaving a balance of Rs 6,00,000. The total value of the Trust amounted to Rs 1,82,344-8-8

as it is clear that it is not facilitating the obtaining of cheap capital alone which will raise the agriculturalists and relieve him from his debts, but the provision of capital combined with the education of his labour and self-help. The Commission also recommended that the principal means of resisting famines was by strengthening the moral backbone of the agriculturalist and by expressed its view that the introduction of co-operation in rural areas might be useful in securing this end.

Co-operative Credit Societies' Act—These recommendations induced Lord Curzon to

might be useful in securing this end

Co-operative Credit Societies' Act—These

appoint a Committee with Sir Edward Law at its head to investigate the question and a Report was submitted to Government recommending that Co-operative Societies were worthy of every encouragement and of a prolonged trial Sir Anthony (now Lord) Macdonald and others were at the same time making experiments on similar lines in the United Provinces and the Punjab with satisfactory results All these activities, however, took a practical shape only when Lord Curzon, with his zeal for getting things done which made him famous in India, took up the question in all earnestness and his Government introduced in the Supreme Legislature a Bill to provide for the constitution and control of Co-operative Societies The main provisions of the Bill which became the Co-operative Credit Societies' Act (Act X of 1904) were—

(1) That any ten persons living in the same village or town or belonging to the same class or caste might be registered as a co-operative Society for the encouragement of thrift and features of the new Act were as follows—

- (1) That any ten persons living in the same village or town or belonging to the same class or caste might be registered as a Co-operative Society for the encouragement of thrift and self help among the members
- (2) The main business of a Society was to raise funds by deposits from members and loans from non-members, Government and other Co-operative Societies, and to distribute money thus obtained by way of loans to members or with the special permission of the Registrar, to other Co-operative Credit Societies

(3) The organization and control of cooperative Credit Societies in every Presidency were put under the charge of a Special Government Officer called the Registrar of Co operative Credit Societies

(f) The accounts of every society were to be audited by the Registrar or by a member of his staff called the Auditor of Co-operative Credit Societies

(c) The liability of a member of a society was to be unlimited in the case of a Rural Society

(6) No dividends were to be paid on the profits of a rural society, but the profits were to be carried at the end of the year to the Reserve Fund, although when this fund had grown beyond certain limits fixed under the bye-laws, a bonus might be distributed to the members.

(7) In the case of Urban Societies no dividend was payable until one fourth of the profits in a year were carried to the Reserve Fund

Soon after the passing of the Act the local Governments in all the Presidencies and major provinces appointed some of their best officers as Registrars with full powers to organise,

New Act Introduced

in the Co-operative Credit Societies' Act and these were brought to the notice of Government by the Provincial Conferences held under the auspices of Local Governments in various Provinces, as well as by the Annual Conferences of the Registrar. In two directions the need for improvement was especially felt. In the first place, the success or credit of a society had led to the introduction of Co-operative Societies for distribution and for purposes other than credit for which no legislative protection could be secured under the then existing law. And in the second place, the need for a freer supply of capital and for an improved system of supervision had led to the formation of various central agencies to finance and control the original credit societies and these central agencies ran all the risks attendant on a status unprotected by legislation. The Government of India, recognising the need for removing these defects, decided to amend the old Act and a Bill embodying the essential alterations proposed was introduced in the Imperial Legislative Council, and after a few amendments it emerged from the Council replacing Act X of 1904 'The outstanding features of the new Act were as follows:—

(a) It authorised the formation of societies for purposes other than credit, which was possible under the old Act only with the special permission of the Local Government. This extension of Co-operation to purposes other than credit marks an important stage in its development in India.

(b) It defined in precise terms the objects for which Co-operative Societies could be organised.

(c) It removed the arbitrary division of societies into Rural and Urban.

(d) It facilitated the growth of sound central agencies by insuring on a limited liability by means of a special clause about the registration of a society one of whose members is a registered member of a society.

(e) It empowered the Local Government to frame rules and alter bye-laws so as to put restrictions on the dividends to be declared by societies and allowed them the discretion of sanction distribution of profits in the case of unimpaired liability societies to their members.

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- (e) It empowered the Local Government to frame rules and alter bye-laws so as to put restrictions on the dividends to be declared by societies and allowed them the discretion to sanction distribution of profits in the case of unlimited liability societies to their members.
- (f) It allowed societies with the permission of the Registrar to contribute from their net profits, after the Reserve Fund was provided for, amounts up to 10 per cent of their remaining products to any charitable purpose as defined in the Charitable Endowments Act. [This kept the movement in touch with local life by permitting societies to lend assistance to local educational and charitable institutions.
- (g) It prohibited the use of the word "Co operative" as part of the title of any business concern except a registered society.

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(8) It prohibited the use of the word "Co-operative" as part of the title of any business concern except a registered society.

(2) It empowered the local government to frame rules and after by-laws so as to put restrictions on the dividends to be declared by societies and allowed them the discretion to sanction distribution of profits in the case of unlimited liability societies to their members.

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(Institution of Agricultural Societies — Agricultural Societies in India)

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Internal Management of Societies — The

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In your Province not only in the Punjab
 and Bombay the numerous shares and deposits
 formed more than 25 per cent of the working
 capital

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If necessary, a new chairman and secretary is elected. The general meeting elects the borrowing limit of individual members lays down the maximum amount upto which the Managing Committee may borrow during the ensuing year, disposes members for misconduct or serious default and settles the rates of interest for loans and deposits. As these meetings are informal, other local topics of public utility are sometimes discussed. All the net profits of the society are annually carried to the Reserve Fund, which is indivisible, that is, incapable of distribution as dividend or bonus, which cannot be drawn upon without the sanction of the Registrar, and which must be invested in such a manner as the Registrar prescribes. It is intended to meet unforeseen losses and to serve as an asset of security in borrowings. Except in the Central Provinces and Madras, the Reserve Funds of primary societies are generally utilised as an addition to their working capital though steps are being taken in some places of the country to stop this practice and to insist on the Reserve being kept entirely apart from the working capital and invested in Government securities or placed as floating deposits in reliable Central Banks. The Government of India state in their Resolution of 1914 "that while there may be advantages in the earlier stages in using the Reserve as part of the working capital of the society, it should gradually, as it becomes more important, be set apart for separate investments." The amount of the Reserve Fund of agricultural societies is roughly 2½ in lakhs of rupees and forms 5 per cent of their total liabilities, and with the addition of the last year's profits, to be carried to Reserve, 12 per cent of the total outside capital of the societies including members' deposits.

Progress of the Movement—The following statement shows the progress of agricultural societies up to the end of the fiscal year 1913-14.

Provinces	Number of Societies	Number of Members	Total Working Capital	Reserve Fund	Net Profit during the year 1912-13	Usual Rate of Interest on Loans
Madras	1,250	77,902	55,79,926	2,59,316	1 17,740	9 3/4
Bombay	584	40,470	28,52,119	1,44,967	87,252	9 3/4
Bengal	1,547	71,282	44,11,613	3,31,471	1 54,362	15
Bihar and Orissa	706	17,270	13,43,297	88,101	71,904	15 1/2
United Provinces	2,350	99,891	50,71,014	2,30,688	1,23,878	15
Punjab	3,261	155,250	1,30,46,019	8,05,271	0,30,888	12 1/2
Burma	1,214	29,880	32,65,694	2,81,884	1,88,884	15
Central Provinces	2 087	34,313	25,70,239	77,145	53,482	12
Assam	254	11,536	2,90,837	40,001	19,364	12 1/2 to 18 1/2
Coorg	31	2,830	1,02,493	15,390	6,113	12 1/2
Ajmer	352	10,387	7,35,611	11,638	21,455	12
Mysore	410	21,875	7,00,120	11,638	11,820	9 to 12
Baroda	246	6,918	4,23,807	43,220	24,543	9 1/2
TOTAL	14,538	509,822	4,04,01,680	24,55,218	15,21,486	

The progress of the movement in different provinces varies according to the activity in organisations work as well as the special conditions of each province—the prevailing rates of interest being the most important of these. A few Native States have also introduced legislation similar to the Co-operative Societies' Act in their territories and the most prominent of these are Mysore and Beroda Hyderabad, Gwalior and Indore have only very recently introduced co-operation in their States. The results of the experiment have been as satisfactory as in British India.

Non-agricultural societies—Just as rural societies are the means of resuscitating the agricultural and other small village industries, a class of societies called the non-agricultural societies has grown in towns and cities for improving the economic and moral condition of artisans and small traders, members of particular caste and employees and of firms and Government departments. These societies have usually a limited liability. This is due to the field of their work not being commensurate with the extent of their liability. These societies are too great a desideratum to go in for profits and dividends and a growing tendency to make the societies close preserves



agricultural societies or through the medium of District Central Banks. A large number of proprietary non-agricultural societies, as stated above, could afford to lend to agricultural societies. Government aid was also freely given and the advances under this head rose from Rs 2,84,718 in 1906-07 to Rs 9,34,601 in 1911-12 and Rs 11,40,020 in 1913-14. With the progress of the movement, however, this aid was discontinued and the only Provincial which continued the practice was Bombay which continued the practice of the continuance of State Banks in the Presidency and the refusal of the Commercial Banks, though constantly approached, to help agricultural societies. When owing to the unwillingness of the ordinary Banks to participate in the movement, the Registrar found it extremely difficult to have even the small number of societies to have the matter on the part of societies. The amount of loans overpaid from members at the end of the year 1913-14 stood at 13 per cent of the total outstanding due to societies. As co-operation is both financially and educationally censured, no efforts are spared by organizers to educate societies in this respect. The Co-operative Societies' Act grants to societies priority of claim against other creditors (except the State or the landlord) to enforce any outstanding demand due to the societies from members or past members upon the crops or other agricultural produce, and upon the cattle, where loans have been advanced for the purposes specified. But not content with this, some co-operators have pleaded for special powers of recovery of loans under which overdue loans may be recovered as arrears of land revenue. For the existence of a special privilege of this character cannot but lead to laxity in the selection of members and carelessness in the granting of loans.

The drawback of the Bombay and the Madras Central Banks is that neither is a co-operative Apex Bank in the true sense of the term, as there are no District Central or Agricultural Societies that are members of, or affiliated to, it, and therefore interested in its success. A Provincial Bank with three Central Banks affiliated to it is in existence in Upper Burma and this Bank finances primary societies either through the affiliated banks or through the guaranteeing or supervising unions composed of societies. An Apex Bank has recently been started in the Central Provinces to form an immediate link between the District Banks in the Province and the Commercial Banks in Allahabad and elsewhere. It has worked well and its success led to the establishment of a Provincial Bank with a similar constitution in Bihar and Orissa. A scheme has also been set afoot for having a Provincial Apex Bank in Bengal, whereas also in Bihar and Orissa, the primary societies are at present financed by Central Banks of district or taluka head-quarters. In the United Provinces many societies are financed on the same system, and there too a Provincial Apex Bank under process of formation. The Punjab has a Central Banking system and though sooner or later it, too, will have an Apex Bank, no definite proposal for the establishment of such Bank has yet matured.

The Financing of Agricultural Societies—As soon as the initial stage of the movement had passed, a very urgent problem had to be faced. This was to finance the agricultural societies that were growing in all directions. And the problem was solved in different provinces according to the special conditions and the stages of development the movement had attained therein. In Madras a Central Bank, which lent to Co-operative Societies, was started without Government aid as early as in 1907. This was followed by the starting of banks at district head-quarters. In other Presidencies, District Banks were established making good the deficiency in the local capital of the societies within their districts, and in some places Joint Stock Banks were persuaded to make advances direct to

seed, manure and agricultural implements, and improvement and sinking of wells, purchase of new lands, and personal maintenance in times of scarcity in the case of agricultural societies, and for purchase of raw materials and for food and other necessities of life in the use of non-agricultural societies. The terms of the loans are one year or less on those for current needs whether for agriculture or partly trade, and up to five years or so on loans for liquidation of old debts or for land improvement. The percentage of the loans repaid by the members in 1913-14 to the total amount advanced in 1913-14 was 29.6 per cent and in 1911-12 and Rs 11,40,020 in 1913-14. With the progress of the movement, however, this aid was discontinued and the only Provincial which continued the practice was Bombay which continued the practice of the continuance of State Banks in the Presidency and the refusal of the Commercial Banks, though constantly approached, to help agricultural societies. When owing to the unwillingness of the ordinary Banks to participate in the movement, the Registrar found it extremely difficult to have even the small number of societies to have the matter on the part of societies. The amount of loans overpaid from members at the end of the year 1913-14 stood at 13 per cent of the total outstanding due to societies. As co-operation is both financially and educationally censured, no efforts are spared by organizers to educate societies in this respect. The Co-operative Societies' Act grants to societies priority of claim against other creditors (except the State or the landlord) to enforce any outstanding demand due to the societies from members or past members upon the crops or other agricultural produce, and upon the cattle, where loans have been advanced for the purposes specified. But not content with this, some co-operators have pleaded for special powers of recovery of loans under which overdue loans may be recovered as arrears of land revenue. For the existence of a special privilege of this character cannot but lead to laxity in the selection of members and carelessness in the granting of loans.

The Working of Central Societies—The following statement shows the number and the constitution of the central societies in the country up to the end of the year 1912-13.

Province	Number of Societies	Number of Members	Total Working Capital	Reserve Fund	Net Profit during the year 1912-13	Usual Rate of Interest on Loans to Societies
Madras	16	1,173	52,19,360	74,028	87,728	7 1/2
Bombay	6	1,682	18,13,356	0,239	29,824	7 to 8
Bihar & Orissa	12	1,142	8,05,221	14,863	28,421	12 1/2
United Provinces	35	12,930	59,09,745	3,11,477	1,40,176	12 1/2
Punjab	38	2,179	41,35,082	33,358	90,454	8
Burma	96	2,748	26,37,114	29,528	62,412	9
Central Provinces	38	6,131	38,17,007	40,263	75,776	7 1/2
Assam	9	421	1,09,929	5,449	6,066	9
Assam	5	775	7,50,324	7,173	23,025	10
Assam	11	197	1,48,515	2,111	9,041	7 1/2
Barod	3	176	1,20,806	443	715	6 1/2
Total	329	34,710	2,90,37,180	5,60,790	6,48,577	

These figures include five Banks which may be treated as Provincial Banks, one Central Bank in Burma, 220 Central Banks and 103 guaranteeing and supervising Unions. The constitution of Central Banks is not uniform, but the existing Banks may be classified under three general heads—(1) Banks or which the membership is confined to individuals or where societies are admitted as members on the same footing as individuals, (2) Banks of which the membership is confined to Societies, and (3) Banks which include Societies and individuals as their members and secure to Societies separate representation on the Board of Directors. The number of Central Banks in the various Provinces (exclusive of Native States) falling under each of the three classes described above are approximately as shown below—

	(1)	(2)	(3)
Madras	4	1	2
Bombay	1	1	2
Bengal	3	6	24
Bihar & Orissa	1	1	11
United Provinces	14	14	41
Punjab	12	20	6
Burma	.	.	2
Central Provinces	.	.	23
Assam	2	.	4
Assam	.	.	5
Total	71	42	126

Functions of Central Banks.—The funds of Central Banks are to balance the funds of Societies and to supply capital. But their duties should not be limited to the provision of banking facilities only, but should include the inspection and supervision of the

Store Societies.

system has properly developed, the Directors of the Central Bank either themselves or through a paid agency organise societies and, as stated above, supervise their working. The number of honorary workers is steadily increasing and in some Presidencies there is a bank who regularly assist the Registrars. There is, however, scope for Organisation on Societies on the lines of similar institutions in England and Ireland and if the District Banks and Unions are affiliated to a Co-operative Provincial Apex Bank, it may be possible to have an Organisation Department of the Bank with branches in the districts.

Store Societies—After the passing of the new Co-operative Societies' Act the application of co-operation to purchases other than credit was greatly extended, but as yet there has been no general demand for productive and distributive co-operative societies. At the end of the year 1913-14, there were very few store societies in the country, the Madras Presidency claiming 10 of these with a membership of 4,404 and a working capital of Rs. 2,40,280. An important introduction of machinery was the Handloom Weaving Industry, and efforts have been made to revive it by the formation of productive co-operative societies of handloom weavers. The 'Weavers' Societies are not merely credit societies, but undertake the purchase of good yarn for members and in some cases have a share in the production of the cloth produced by store branches to sell the cloth produced by them. They have also been instrumental, particularly in Bombay, the United Provinces, and the Central Provinces, in introducing improved looms and methods amongst the co-operative weavers. The number of these societies in Bombay is 29, in Bengal 3, in Madras 1, in the United Provinces 2, (excluding a number of weavers' credit societies 4), in the Central Provinces 51, in Burma 4, and in Assam 4.

The other Productive Societies are those for 'Gulches' or mulberry, dyers, basket and grass workers in the Central Provinces and 'Channan' and 'dhoro' in Bombay. There are also building societies in Madras, a zamindari society in Bengal, and a Sugar Factory working on co-operative lines in Benares. A Housing Society has been started in Bombay and a Housing Association has been founded to encourage the formation of more such societies. There are a few dairy societies, the most well-known of these being those at Lucknow and Benares. Burma possesses a novel type of societies for the sale of paddy, having 53 such societies. It is also a pioneer in the matter of co-operative insurance, and has 59 Cattle Insurance Societies with a membership of 1,089. Nine Cattle Insurance Societies have also been started in Coorg and 1 in the United Provinces. The total number of non-credit societies, whether agricultural or non-agricultural, is only 249. The following table exhibits the progress of other forms of co-operation in the different parts of the country.

Type or Society	Purchase or Production and Sale												Production & Sale												Insurance												Others												GRAND TOTAL																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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Agricultural Co-operation—Agricultural societies have until recently been engaged only in supplying cheap credit to their members but there are various other fields of work in which they may extend their activities. Grain Banks may be started with advantage, receiving deposits in kind and allowing these to accumulate to be sold at profitable rates or distributed to the members in times of scarcity. Such Banks have been started in Bombay and Madras. Societies on a similar principle for the storage of fodder may assist in solving what is likely to become in the near future an important problem in rural economy. Another direction in which the co-operative societies for purchase of and distribution among members of small seed societies have been organized in the Bombay Presidency and in the Central Provinces Societies for the co-operative purchase and sale of manure will also prove

owned capital to supply their working needs and to meet the claims of creditors on liquidation. Stress is laid on the necessity in the case of primary societies of providing for themselves take deposits or providing for themselves either by their own investments or by arrangement with the financing institutions and adequate build resource. After satisfying the requirements in this direction, where necessary, primary societies should be left to utilize their assets in their own business. The function of supervising the primary societies according to the Committee on the devolves, and can best be carried out by a staff maintained by co-operative institutions. These duties, it is added, can be performed most in conformity with true co-operative methods by the formation of supervising unions of societies on what is known as the Burma model. These unions form a link between the financing agencies and the societies, and bring the societies together most effectively for the purpose of mutual supervision, assessment of credit and recovery of loans. In the view of the Committee a guaranteeing Union of some kind is advisable where the financing agency is a Central Bank, and essential in cases where a Bank dealing with a whole province attempts to deal with societies without the intervention of a Central Bank. Central Banks are at present of three classes according to their shareholders are all individuals, all societies, or some individuals and some societies, and while advocating the disappearance of the first class and the ultimate adoption of the second the Committee believes that for the present the third or mixed form of constitution offers the best advantage. To balance the co-operations and deficiencies in Central Banks and to supply them with funds it advocates the foundation at an early date of a co-operative institution at the head of each Province which does not now possess one. These institutions too should in the Committee's opinion have a mixed constitution in which individuals and co-operative Banks should both be represented. In view of the peculiar nature of co-operative finance, the Committee recommends that the period of deposits accepted by Co-operative institutions should ordinarily be as long as possible, but that only in very special cases where Central Banks are in a position to secure debentures on immovable property should capital be raised by debentures. The necessity for building up an owned capital is emphasized as also the special necessity for central financing institutions to equalize their finances. The Committee recommends on the absence of facilities for discounting co-operative paper and on the urgency, under the circumstances, of Central Banks maintaining liquid resources sufficient to meet half the deposits due for repayment within the next twelve months, a standard of one-third being sufficient in the case of Provincial Banks. As in the case of primary societies, central institutions too may after satisfying the requirements in this respect be left to utilize their surplus assets in their own business. The Committee recognizes that its recommendations regarding the build resource will entail a disagreement with existing financial conditions and will in many cases involve a considerable raising of existing margins between the borrowing and lending rates. The Committee insists on the vital importance of proper audit and supervision in the case of Central and Provincial Banks the audit of accounts should be done on payment either by professional or Government agencies, the Registrar being responsible for the inspection and general supervision of these societies. For primary societies, the Committee thinks that the auditing staff may be divided into two sections (a) a staff maintained by Government for super audit and (b) a staff maintained by co-operative institutions for original audit. The only prominent administrative concession recommended by the Committee is the introduction of a special procedure for recovery in liquidation and another concession which may be much availed of in adopted is the suggestion that where loans under the Agricultural Loans or the Land Improvement Loans Act are being given by Government on a large scale it should be open to societies to receive such loans for distribution to their members. The Committee recognizes that with the growth of co-operation a new factor in district administration has come into being and therefore desires that the District Officer be entitled to attend all meetings of Central Banks in his jurisdiction though it deprecates the devotion to the District Officer of duties assigned under the Act to the Registrar, or any general arrangement for making him an ex-officio Chairman of the Central Bank at District Headquarters. The Committee recommends that two controlling officers should be employed in each province and that there should be a Registrar or Joint Registrar for every 1,000 or fraction of 1,000 societies registered. The Registrar should be a whole time officer and his post should be included as a Collector's post in the cadre of the Province, the special qualification for the post being that he should be well-versed in co-operative literature relating to all countries and should, if possible, have gained some personal experience of the subject in Europe. The Committee has examined a proposal for the co-ordination of certain economic departments including those of Co-operation, Agriculture and Industries under a single officer of high standing in each Province and has recommended that a move be made in this direction as an opportunity offers. The need for closer control by Government over the objects for which the co-operative organization is utilized and over the financial arrangements of the movements is emphasized and to meet the latter it is suggested that an officer with co-operative experience be appointed to act as adviser to the local and finally examined the effect on the co-operative movement of recent famines, of banking crises, and of the present war, and states that the Government has hitherto given direct financial aid to co-operation in three ways, only, viz (1) by the grant of initial advances to new societies (2) by guaranteeing the interest on debentures of the Bombay Central Bank and (3) by special advances in two Provinces to meet difficulties anticipated in connection with the war. The Committee expresses its concurrence with the present policy of Government so far as it represents a rejection of the system

take a lively interest in the internal work of their societies. There are a few cases where a society has set its face against drunkenness, expelled members notorious for their intemperate habits and has in other ways worked for a better morality by insisting on a high standard of life. Societies have occasionally demanded excesses and even heavy expenditure on marriages, and have thus indirectly trained members to the habit of thrift. Liquidation of old debts again has been rendered possible to a great extent and many an agriculturist who was formerly in a state of chronic indebtedness has been relieved of all his debts and freed from the necessity of incurring new ones. Credit has been much cheapened and it is now possible for the agriculturist to borrow at 9 to 18 per cent what he could not borrow at less than 20 to 25 per cent formerly. It has been calculated that in interest alone the agriculturists of India, by taking loans from co-operative credit societies instead of from the village money lenders, are saving themselves from an unnecessary burden of at least 20 lakhs of rupees. The village rate of interest has naturally gone down considerably and the farmer has not the terror and the foreboding which have been inculcated with the beneficial result that the agriculturist has learnt to conduct his own work more efficiently. Thrift has been encouraged and the value of savings better appreciated. Partial ration in the management of societies has brought home to the members the importance of self-help, and self-reliance, but the most important achievement of co-operation has been the instilling of a sense of community life—a feeling of all for each and each for all—amongst the members of a co-operative body. If these signs become as common as they are now rare, and if, over and above the economic benefits achieved by it, co-operation succeeds in its true aim—the building up of the character of the people and the promotion of their welfare by the inculcation of the ideas of thrift and the principles of self-help, and, above all, by showing the wisdom of mutual help and brotherliness amongst the neighbours a re-education of rural life conducive to a better national life will not be far off.

Social Reform—Co-operation has, in some places, stimulated the desire for education and members of rural societies have been known even to advance age to receive the elements of education to enable them to put their signatures on the society's papers, and to

Defective Education—It is the existence of those who have to deal with the organization and management of rural societies that the sad state of education among the agricultural population is not only a real hindrance to the development of co-operation but seriously endangers its very existence. There are villages where no schools exist and where there is hardly one individual who can read and write tolerably well. In most villages a few literate people can be found and it is these that form the nuclei of co-operative societies. Their ignorance in other matters is often so abysmal that it is hardly possible to drill into their minds even elementary notions of co-operation. Happily there are different kinds of villages where about 50 to 70 per cent of the population are able to read and write and where one finds a dozen intelligent men who can understand the elements of co-operation. In a large number of societies, as has been pointed out previously, the secretaries who are the real managers are not bona fide members. Thus, it may be urged, is contrary to a fundamental principle of co-operation that they should be internal managers of the business, but it can scarcely be helped in a country where there are only a few among the total village population able to keep their accounts much less to undertake the management of a society. It is true that co-operation provides a higher type of education, but when the ground work itself is lacking it is impossible to build up the superstructure.

of money, and of undue concessions, but points out that in order to make the movement self-sustaining it will be necessary to provide some means of recommending the proposed notes of societies, either through the Presidency Banks or by means of a State Co-operative Bank and recommend that a careful examination be made of this question. The recommendation of the Committee are under consideration by Government.

The Cocaine Traffic.

The form of cocaine chiefly used in India is Cocaine Hydrochloride. This salt forms light shining crystals, with a bitterish taste, and is soluble in water. The alkaloid cocaine—of which this is a salt—is obtained from the dried leaves of the *Erythroxylon Coca*, one which grows in Bolivia, Peru, Java, Brazil and other parts of South America. The leaves are most active when freshly dried and are much used by the Natives as a stimulant. Tea made from them has a taste similar to green tea and is said to be very effective in keeping people awake. In India the Coca plant seems never to have been cultivated on a commercial scale. It has been grown experimentally in the districts of Ceylon, Bengal and Southern India and has been found to produce a good quality and quantity of cocaine. As the plant has not been seriously cultivated and as there is no possibility for the present or the drug being manufactured in India, no restrictions have yet been placed on its cultivation.

Spread of the habit—The cocaine traffic in India which seems to be reaching alarming proportions in spite of legislation and strict preventive measures is of comparatively recent growth, though it is impossible to estimate how widespread it was in 1903 when the Bombay High Court for the first time decided that cocaine was a drug included within the definition of an intoxicating drug in the Bombay Abkari Act. Since that date the illegal sale of cocaine in India has largely increased and the various provincial Excise Reports bear witness to the spread of the "Cocaine habit." The consumers of the drug, which is notoriously harmful, are to be found in all classes of society and in Burma even school children are reported to be its victims, but in India as in Paris the drug is mostly used by prostitutes or by men as an aphrodisiac. The habit has spread chiefly to those classes which are prohibited by religion or caste rules from partaking of liquor and the well known Indian intoxicating drugs.

Imports from Europe—Cocaine and its allied drugs are not manufactured in India, but are imported from Germany, France, England and Italy. Most of the drug which is smuggled into India, comes from Germany and bears the mark of the well-known house of D. Alcock, Darmstadt. This firm issues cocaine in flat packages of various sizes ranging from 1 to 3 ounces which are easily packed away with other articles and greatly favour the methods of smuggling. Owing to its strength and purity cocaine eaters prefer this brand to any other in the market. Restrictions on export from Europe have been under consideration for some time but as yet no international scheme devised to that end has been agreed upon.

Smuggling—So far as the cases already detected show, the persons who smuggle the drug by sea from Europe and places outside India, into India, are chiefly sailors, stewards, firemen and sometimes engineers and officers of the Australian Lloyd and Florio Rubattino S. Companies. The ports through which cocaine enters India are Bombay, Karachi, Calcutta, Madras, Marazion and Pondicherry. The main inland distributing centres are Delhi,

Price—The cocaine seized is either given to Hospitals in India or destroyed. It is no longer possible to buy cocaine from any dealer but so far as it was ten years ago, but scores of cases in the Police Courts show that the retail trade thrives, though to a diminished extent, in Bombay. High profits ensure the continuance of the trade. At present the English quotation is 12 shillings per ounce and the price as sold by licensed chemists in India is about Rs 17 per ounce. Owing to the war and the consequent stoppage of illicit importations from Austria and Germany it is not possible to buy the smuggled drug from the wholesale dealers for less than Rs 80 to 85 per ounce and when sold by the grain the price realized varies from Rs 300 to Rs 360 per ounce. These profits are further enhanced by adulteration with phenacetin and inferior quinine. **The law in regard to Cocaine**—This varies in different provinces. A summary of the law in Bombay is as follows. No cocaine can be imported except by a licensed dealer and importation by means of the post is entirely prohibited. The sale, possession, transport and export of cocaine are prohibited except under a license or permit from the Collector of the District. A duly qualified and licensed Medical practitioner is allowed to transport or remove 20 grains in the exercise of his profession, and as far as 6 grains may be possessed by any person if covered by a bona fide prescription from a duly qualified Medical practitioner. The maximum punishment for illegal sale, possession, transport, etc under Act V of 1878 as amended by Act XII of 1912 is as follows. 1 imprisonment for a term which may extend to two years or fine which may extend to Rs 2,000 or both and on any subsequent conviction imprisonment for a term which may extend to 2 years or fine which may extend to Rs 4,000 or both. In Bengal the maximum imprisonment awardable as present for importation or possession of cocaine is 3 months without a fine up to Rs 1,000.

INDIAN TORRESCO

Many attempts have been made to introduce into India a variety of tobacco, but all have been disappointed. It is to be hoped that the recent report of the committee on the subject will lead to a better price for the tobacco, and to a better price for the tobacco.

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The Women's Medical Service for India.

This Service which was recently inaugurated under the auspices of the late Lady Har-

dinge, it included in the National Association for supplying female medical aid to the Women of India, generally known as the Countess of the Dufferin's Funds and is administered by the Central Committee of that Fund. The Government of India has so far allotted the sum of £10,000 per annum towards its maintenance. The present sanctioned cadre is twenty-five first class medical women, of which number five is for the purpose of forming a leave reserve. Recruitment of the service is made (a) in India by a medical sub-committee of the Central Committee which includes the Director-General, Indian Medical Service, the Honorary Secretary to the Central Committee, and a first-class medical woman, (b) in England, by a sub-committee, consisting of a medical man and two medical women conversant with conditions in India, to be nominated by the Home Committee of the Countess of Dufferin's Fund. These sub-committees perform the duties of a medical board examining candidates for physical fitness, and for return to duty after invaliding.

The Central Committee determines what proportions of the members of the Service is to be recruited in England and in India respectively. In the original constitution of the Service, duly qualified medical women who are in the service of, or who have rendered approved service to, the Countess of Dufferin's Fund, are to have the first claim to appointment, and thereafter special consideration is to be paid to the claims of candidates who have been qualified in local institutions and of those who are natives of India.

Qualifications—The qualifications are that the candidate must be (a) a British Subject resident in the United Kingdom or in a British Colony or in British India, or a person resident in any territory of any Native Prince or Chief under the suzerainty of His Majesty exercised through the Governor-General of India or through any Governor or other officer subordinate to the Governor-General of India. (b) Must be between the ages of twenty-four and thirty at entry. (c) She must be a first-class Medical Woman, i.e., she must possess a medical qualification registered in the United Kingdom under the Medical Act, or an Indian or Colonial qualification other than L.D.S. or Licentiate of a Medical College in India registrable in the United Kingdom under that Act but this condition does not apply at the original constitution of the Service to medical women in charge of hospitals who, in the opinion of the Central Committee, are of proved experience and ability. (d) The candidate must produce a certificate of health and character. But the Central Committee reserves the power to promote to the service ladies not possessing the above qualifications, but who have shown marked capacity. Members of the Service are required to engage for duty anywhere in India or Burma. Those recruited in England serve for six months, and those recruited in India for three months, in a General Hospital of the Province to which they

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ing school in India for the instruction of native pupils in medical and surgical nursing, and in midwifery was established in 1886 by the Bombay Branch of the Association in connection with the Cama Hospital in Bombay. This is a civil institution under Government management, and is solely for women and children of all castes and denominations. In connection therewith is the All India Obstetrical Hospital and the Jaffer Sultuman dispensary for women and children. The present physical charge is Miss A. M. Benson, M. A., London. By the end of 1914 there were thirteen Provincial Branches working under the central committee, and attached in some manner, or affiliated to the provincial branches, there were about one hundred and forty local and District Associations or Committees engaged in furthering the work of the Association.

NURSING.

Whilst India cannot show the complete chain of efficiently nursed hospitals which exists in England, there has been a great development of skilled nursing of recent years. This activity is principally centred in the Bengal, Madras, and Bombay Presidencies, where the chief hospitals in the Presidency towns are well nursed, and where large private staffs are maintained, available to the general public on payment of a prescribed scale of fees. These hospitals also act as training institutions, and turn out a yearly supply of fully trained nurses, both to meet their own demands and those of outside institutions and private agencies. In this way the supply of trained nurses, English, Anglo-Indian and Indian, is being steadily increased. In Bombay the organisation has gone a step farther, through the establishment of the Bombay Presidency Nursing Association, c/o St. George's Hospital. This is composed of representatives of the various Nursing Associations in charge of individual hospitals, The principle on which the relations of this Association with the Local Associations is governed is that there shall be central examination and autonomy in administration.

Nursing Bodies—The Honorary Secretary of the Calcutta Nursing Association is Mr. R. B. Reynolds, the Presidency General Hospital. The address of the Mayo Hospital Nursing Association is in Strand Road. In Madras there is the General Hospital, with a staff of 62 nurses, the Government Maternity Hospital, the Caste and Gosha Hospital at Kilpatrik, the Royappa Hospital and the Ophthalmic Hospital.

Bombay Presidency—The Bombay Presidency was amongst the first in India to realise the value of nursing in connection with hospital work. The first steps were taken on the initiative of Mr. L. R. W. Forrest at St. George's Hospital, Bombay, where a regular nursing cadre for the hospital was established together with a small staff of nurses for private cases. This was followed by a similar movement at the J. J. and Allied Hospitals and afterwards spread to other hospitals in the Presidency.

Ultimately the Government laid down a definite principle with regard to the financial aid which they would give to such institutions, raised from private sources. Afterwards, as the work grew, it was decided by Government that each nursing association attached to a hospital should have a definite constitution, and consequently these bodies have all been registered as Associations under Act 21 of 1900. In degree substantial endowments have been built up although the Associations are still largely dependent upon annual subscriptions towards the maintenance of their work. The chief of these Associations are—

St. George's Hospital Nursing Association, Secretary, D. W. Wilson, St. George's Hospital, Bombay.

J. J. Hospital Nursing Association, Secretary, A. C. Gray, Jammisethi Bhabha Hospital, Bombay.

Gokaldas Tejpal Hospital Nursing Association, Secretary, Mahimullah Currim boy.

Cama Hospital Nursing Association, Address—Cama Hospital, Bombay.

Sassoon Hospital Nursing Association, Alameda and 1st Memorial Association, Address—Civil Surgeon, Alameda.

After further experience it was felt that it is undesirable to have a considerable number of detached and independent nursing associations, training and certifying nurses without any common standard of entrance examination, or certification. It was therefore decided to establish the Bombay Presidency Nursing Association which came into existence in the year 1910. This is an Association formed partly of representatives of all affiliated associations and partly of direct representatives of the Government, the Surgeon-General with the man. It is financed partly from the product of endowments and partly from contributions from the Government of India. It subsequently further funds are added they are to be provided by contributions from the affiliated Associations.

Indians Abroad.

The Indian is naturally averse from emigration beyond the seas. Nevertheless there are some hundreds of thousands of Indians resident in other lands as labourers, shopkeepers or professional men. Their total number relatively to the population of the Indian Empire is very small being something under two million. In itself, however, it is considerable, and it acquires an extrinsic importance from the social and political issues involved in the settlement of Indians, either as indentured labourers in Crown Colonies, or as free residents in self-governing countries.

The right to migrate—From the Imperial standpoint the case of Indian migration to the self-governing Colonies is much the more important. During the last two years the problems arising therefrom became acute. There were two centres of difficulty—South Africa and British Columbia. In each country the situation involved particular local problems of extreme difficulty. But before passing to a discussion of them it is necessary to refer to the larger question of the right of migration within the Empire. The intense feeling aroused in India by the disabilities suffered by Indians in the two countries named was primarily due to the belief that Indians were being denied the common rights of British citizenship. Without attempting to define the term "British citizenship," which is not so easily susceptible of definition as may be imagined, it must suffice to observe that unrestricted migration within the Empire does not appear to be the common right of His Majesty's subjects. The laws of the Dominion of Canada and the Commonwealth of Australia confer powers of exclusion of would-be immigrants hailing from any part of the world. These laws have been enforced against Englishmen on various grounds. The ground of exclusion is usually economic, and it is on that ground that the Colonial objection to unrestricted immigration from India operates. It is unfortunately inevitable that the problem assumes in the popular mind a racial complexion. But in actual experience it is the clash of economic interests and the possible political difficulties involved in the settlement of Indians in large numbers in the self-governing Colonies which the statesmen of the Empire have to take into account.

In South Africa the trouble gathered round the disabilities of Indians already settled there. The question of immigration restrictions, though important, held a less prominent place in the agitation. The most acute point of the controversy was the annual £3 head tax in Natal. Restrictions on the migration of Indians from one State of the Union to another was another sore point. The requirement to take out trading licenses was also felt to be a vexatious and invidious distinction between Indian and European traders. While the controversy was at its height, an Act was passed in the Union Parliament, restricting entry into South Africa to the wife or child of a lawful immigrant or resident who was the wife or child of a monogamous marriage. In a case brought before the courts it was decided that the only wife of a marriage solemnised in a monogamous marriage.

There are some 4,000 Indians already settled in British Columbia, chiefly Sikhs. They work as agricultural labourers, in factories and number yards, and also on the railways. The desire amongst them to bring their wives and families out from India points to the fact that they are fairly prosperous and and the conditions of life in the Colony agreeable. The attitude of the Colonial authorities towards Asiatic immigration. It is felt that the unrestricted entry of Asiatics would threaten the existence of British Columbia as a "White man's country." The immigration of Japanese and Chinese is regulated by special treaties with their Governments. The number of Chinese immigrants pay a head tax of 500 Japanese is limited to a few hundreds annually according to the rites of a religion permitting polygamous marriages could not be admitted. The leaders of the agitation in South Africa adopted passive resistance tactics, which brought large bodies of Indian workmen in Natal into conflict with the police. The situation became acute, and a strong demand arose in India for the appointment of a Government Commission to enquire into the whole question. The Union Government appointed a Commission, and invited the Government of India to send a representative. Sir Benjamin Robertson, Chief Commissioner of the Central Provinces, was selected. The Commission reported on the whole favourably to the Indians. It recommended the repeal of the £3 head tax and the removal of restrictions on migration within the Union.

In British Columbia, the trouble over Indian immigration came to a head in the early part of this year, when a ship load of Indians was despatched direct from the Far East to Vancouver. It was held up in the harbour there for several weeks. The passengers were not allowed to land. An appeal to the Canadian courts resulted in the rejection of their claim, and eventually they were shipped back to India. The arrival of the Komagata Maru in Calcutta on September 20, 1914, was the occasion of a most lamentable incident. A deputing an attempt to organise a political organisation, the authorities provided special trains to convey the returned immigrants to their homes in the Punjab, and had taken them to do so, some sixty men immediately proceeded to their homes, but the balance under the leader, Gurdit Singh, endeavoured to force their way to Calcutta. They were turned back by the military, and whilst arrangements were being made for a second special train, opened fire on the police and Officers. The military dispersed the immigrants by fire, and the majority were afterwards arrested. Gurdit Singh, and Mr. Lomax, Eastwood, Calcutta Police, and six others of the B. B. S. Railway, were killed, sixteen rioters were killed, as well as two onlookers. The Government of India appointed a Commission under the Presidency of Sir William Vincent to investigate the matter and it took evidence in Calcutta and the Punjab.

Indian Feeling—For some years past, there has been a growing feeling amongst Indian leaders that the indentured system of labour was inconsistent with national self respect, and should be stopped. This feeling originated in the belief that the treatment accorded to Indians in the self-governing colonies, especially in South Africa, was due to the Colonials coming to think poorly of Indians as a race because of the class represented by indentured labourers. In 1910, the Government of India accepted a resolution moved by the late Mr. Gokhale putting an end to the indentured system so far as Natal was concerned. In 1912, however, they opposed this resolution to abolish the system altogether. Opinion in India has been rising against the system, and it is not forced by the rapid industrial development of the country making largely increasing demands on the labour market, depleted to some extent by the ravages of plague during the last twenty years. The startling figures of suicide and the admissions as regards the prevalence of gross immorality among estate populations have roused public feeling in the country, and this has been accentuated by well authenticated cases of young caste women or respectable girls having been decoyed by dishonest recruiting agents to the extent on deposits Mr. C. F. Andrews, late of St. Stephens' College, Delhi, and now connected with the school conducted on his own original lines by Sir Habibuddeen Tagore—the former laureate of the Viceroy, applied him—at Bombay to the Indian Citizenship Association deputed by the Indian Citizenship Association of Bombay to visit Fiji and to investigate the conditions which make for the high rate of suicide recorded in that colony. He is accompanied by Mr. W. Pearson, who is also an assessor with the Police School Messias, Andrews and Mr. Pearson, it may be mentioned, visited South Africa when the Passivists Resistant League led by Mr. Gandhi was in the height of its activity, and rendered valuable service in bringing about the settlement that was eventually arrived at. They have visited Australia on their way to Fiji, and have, it is understood, enlisted the sympathy of leading Australian statesmen on behalf of the mission.

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Indians in Great Britain.

Close on sixty years have gone by since the Parsi community, in the persons of Mr. Dadabhai Nauroji and other members of the firm of Cama and Co., led the way in the residence of Indians in England for business purposes. This lead it has since maintained, though there are both Hindu and Mohammedan business men firmly established there. Not are the professions unrepresented, for there are in London practicing barristers and solicitors of Indian birth. Two Indians are on the Secretary of State's Council, and at least one successful in the Civil Service examination elected to work in England instead of returning to his native land. The early years of the present century have seen the gathering of a new Indian element in permanent residence—that of retired officials (particularly of the I. M. S.) and business men, or people of independent means who from preference, or in order to have their children educated in England, leave the land of their birth and seldom if ever visit it again. Further, the (temporarily greatly diminished by the war) stream of Indian summer visitors includes wealthy people who return as regularly as the swallows in spring, and some of them spend as much time in England or on the Continent as in their native land. While the men adopt European dress so fully that a turban is a rare sight even at Indian gatherings, the ladies wisely retain their graceful Eastern habiliments, and it is astonishing to note on occasions how large a number of Indian women so attired can be collected together at the Criterion or at 21 Cromwell Road. In the last fifteen months thousands of our valiant Indian soldiers, wounded or invalided from Flanders, have gone to England for the first time in their lives, to be nursed back to health in the well-equipped and admirably administered Indian hospitals in Hampshire, and at Brighton.

The Students

But under normal conditions it is the student community which constitutes the greatly preponderating element and creates an Indian problem. Its numbers have multiplied ten or twelfold in the last quarter of a century, the increase being especially rapid since 1904. In 1905 there was indeed an artificial inflation of some five years ago, when many youths (some of them ill prepared) were hurried off to the Inns of Court in order to be entered before more stringent rules for admission from the overseas dominions came into force. While this sudden expansion has been worked off to a large extent, there has been development in other directions, and particularly that of the technical and engineering schools and classes. Allowing for the very considerable temporary check caused by the European War the aggregate number may be estimated at between 1,300 and 1,400. This total does not include more than a few of the growing number of youths of good family, some of them heirs of Native States, admitted into our public schools, including Eton and Harrow. Nor the younger children of resident Indians. It does not comprehend Burmese students of whom there are about 80. Nor does it take full account of female students.

Two strange delusions (in some cases they may be called deliberate misrepresentations) have been propagated in reference to these arrangements. One is that the India Office set up the Bureau in order to track down the wave of seditious sentiment which culminated in the assassination of Sir Curzon Wyllie five years ago. As a matter of fact the Bureau was established three months before the commission of that crime, and was proposed at least a year previously. The object as *The Times* observed in September 1908 was not "to put these young men into political leading strings, nor officially to restrict their liberty. It lies in doing all that is possible to facilitate their educational progress and their general welfare, and in bringing them under whole-some and helpful influence." Mr. Arnold accepted his appointment on the distinct understanding that the young people from all parts of India of both sexes and all ages under instruction in schools and colleges. While it is not possible to obtain exact and complete records, it is certain that the young people from all parts of India of both sexes and all ages under instruction in the British Isles cannot be far below 2,000.

It is, however, with the 1,500 of 1,400 young men, almost all far removed from parental oversight and control, that the organization set up by the Secretary of State for India has to deal. Of these on 30th June last 151 were at the Middle Temple, 145 at Lincoln's Inn, 66 at Gray's Inn and 68 at the Inner Temple. Altogether, including technical and medical students, there must be 600 or 700 in London. Edinburgh comes next with over 200, Cambridge with 100, Oxford with 60, Glasgow with 70 and Manchester with 30, while there are smaller numbers at Birmingham, Leeds, Sheffield, Dublin, and other centres.

The Bureau

It is well known that until a few years ago the young Indians, apart from inadequately supported unofficial effort and the chance of coming under the influence of English friends of their families, were practically left to their own devices. But in April 1900 Lord Morley, as a result of the investigations of an India Office Committee, created for their benefit a Bureau of Information and appointed Mr. J. W. Arnold to the charge of it under the title of Educational Adviser. The Bureau was located in due time at 21 Cromwell Road, together with the National Indian Association and the Northbrook Society, which were thus given spacious quarters for their social work among the young men, without incurring what would otherwise have been the prohibitive cost of heavy rent. Lord Morley also established an Advisory Committee, mainly composed of influential Indian residents, and in India corresponding provincial and district committees were formed to help and advise intending students. The work of the Bureau rapidly expanded, and in consequence Lord Crewe in 1912 re-organised the arrangements under the general charge of a Secretary for Indian Students, Mr. C. E. Mallet. While Mr. Arnold continued to look after the London students and to act as guardian when so desired by the parents, local advisers were appointed at the provincial universities.

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understanding that there would be no sort of espionage, and Mr. Mallet told a gathering of students in 1913 that it was a complete delusion to regard the Bureau as an instrument to do with it if that were its character

Opening Closed Doors

It is no less of a delusion for the students to hold, as some of their elder fellow-countrymen have encouraged them to do, that the Bureau is responsible for restrictive rules and regulations of colleges and other institutions, or at any rate for their continuance in spite of protests. The fact of the matter is that in consequence of the wave of disaffection to which reference has been made, as well as of various practical difficulties arising from the growth in numbers of Indian applications for admission many of the universities and other educational institutions had passed restrictive, and in some cases almost prohibitive regulations affecting Indians when the Bureau came into being. The authorities in question are independent of outside control, and no department in Whitehall are they cannot do more than approach them with requests and suggestions for the benefit of Indians, or with undertakings to afford the sponsorship which in many cases is made a condition of admission.

So far from blocking the way, as hostile observers have alleged the Bureau has been uniformly successful in opening closed doors and admitting successful students. Mr. Mallet has intimate knowledge of the co-operation of any organization for promoting the educational interests of the student. But it is no less a fact that the Bureau has been successful in making eloquent speeches and resolutions than to study rules and regulations and represent to the authorities with moderation and clearness where they need amendment and such organizations have so far been intransigent. The complaints made by some of the students were investigated in a most sympathetic spirit by an Indian sub-committee of the London Advisory Committee, and the report was published last summer. With the letter in reply from the Secretary of State in Council (then Lord Greve) it affords evidence that the work of the department has been earnest and well directed, and that, to quote the comment of *The Times*, "young Indians can be advanced and sustain their claims in relation to educational institutions at home by co-operation with the machinery the Secretary of State has provided, rather than by aloofness and hostile criticism of the department. There are no insuperable obstacles of race. Sir J. J. Johnson's Committee on State Technical Scholarships reported in 1913 that the difficulties encountered by young Indians in supplementing academic instruction by technical experience in factories and workshops are general in character, being also applicable to their English contemporaries, and that there is "on the whole very little evidence of a racial prejudice against Indians." And no youth need go to England under any misapprehension as to the facilities for his education and their limitations. The excellent "Hand-book of Information for Indian students" issued by the National Indian Association and

Persuasion not Coercion.

Another mistaken notion, held by some Anglo-Indians of the old type, is that the Bureau can easily exercise disciplinary control over all young Indians in London. The fact is that except in respect to holders of Government and some Native State Scholarships it has no disciplinary authority save when it places their sons under guardianship of Mr. Arnold or a provincial guardian. And even in these cases the control can only be exercised in connection with the administration of the regular allowances. The Bureau has had a most beneficial influence in saving scores of young men from falling into debt, intemperance, or marital folly, but this has been effected not coercively but by kindly personal contact and keeping before them the obligation and necessity from every point of view or adhering to the purposes to which they have gone to England. From the first the keynote of the scheme has been that of enabling the students to make use of facilities for their welfare at their own discretion without any apprehension or constraint or coercion. Generally it may be said that considering the difficulties of the problem the success attending the arrangements initiated in April 1909 has been considerable, and that they have in them the promise of increasing good in the light of the removal of misunderstandings and prejudice should be materially promoted by the changed and standard conditions brought about by India's magnificent response to the call of Empire in the European War.

In this young Indians in England have had their part. A few promptly enlisted in Kitchener's Army, being readily admitted on satisfactory the usual physical tests. Many others inspired thereby by Mr. E. Gandhi, who was in England on his way from South Africa to India when the war commenced, offered their services unconditionally to the authorities, with the result that an Indian Field Ambulance Corps was organized under the command of Colonel R. J. Barker, late I.M.S. The total enrolled strength of the Corps was 272, of whom altogether 215 were employed at the various Indian hospitals and depots in England, or on the Indian hospitals. The Corps would have grown still further had not the War Office stopped recruitment in consequence of the ample provision made by the Government of India in the equipment of the medical and ambulance side of the Expeditionary Force. But in the autumn there were still nearly 100 members of the Corps serving. Two of them had received permanent commissions in the I.M.S. Meanwhile a committee of students pressed the claims of Indians at the University of London and other educational institutions to be admitted to the Officers' Training Corps. The official reply is that it is one of several military questions which can only receive adequate consideration from the military authorities after the conclusion of the war.

Appointments to the Indian Services.

Full details of the regulations governing appointments to the Indian Services are published in the India Office List. The more essential particulars, except as regards the Civil Service and Police,—of which fuller details are given elsewhere in this Book—are given below.

Indian Agricultural Service.

The salary attached to posts in the Indian Agricultural Service will ordinarily be—

Rs	For the first year
100 per mensem.	second year
130	third year
160	fourth and subsequent years
500 rising by annual increments of Rs 50 a month to Rs 1,000 a month	

Candidates who are required to undergo a further course of training in India as explained above will be appointed on this scale of salary, commencing on a day of Rs 400.

Where, for special reasons, a candidate is recruited for direct appointment to one of the regular posts under paragraph 1, his initial pay will be determined with reference to the special qualification on the length of European experience required for the appointment for which he is specially selected, but has subsequent increments of salary will be regulated by the foregoing scale. In addition to this scale of pay, officers filling appointments directly under the Government of India, as distinguished from appointments under Local Governments (but not including officers holding supernumerary posts, the post of Inspector-General, or the post of Director of the Pusa Institute) will be eligible for local allowances conditional on approved good work, and the Government reserves to itself the fullest discretion as to granting, withholding, or withdrawing them.

Indian Civil Veterinary Department.

Veterinary Surgeons. Evidence of a knowledge of bacteriology, and of capacity for carrying out original research, will be specially taken into account in estimating the claims of candidates. Good health, a sound constitution, and active habits are essential, and candidates must be certified by the Medical Board of the India Office to be physically fit for service in India. Pay will be as follows—On arrival in India Rs 500 a month, rising by Rs 40 each year to Rs 100, which rate will continue from the beginning of the 10th to the end of the 20th year of service, after the beginning of the 21st year Rs 1,200 a month.

The appointments in the Indian Agricultural Service include those of Deputy Director of Agriculture, Agricultural Chemist, Economic Botanist, Mycologist, Entomologist, Professors of Agriculture, Chemistry and Botany at Agricultural Colleges, and the like. Some of these are included in the Imperial Department of Agriculture under the direct control of the Government of India, but the majority are included in the Departments of Agriculture of the several provinces of India. In some cases candidates will be appointed direct to these posts, but in most cases they will be appointed as supernumeraries, will undergo a further course of training in India in Indian agriculture, and will be appointed to posts, for which in the opinion of the Government they are considered suitable on the regular establishment as vacancies occur. Appointments are made by the Secretary of State for India as occasion may require. Candidates must, as a rule, be not less than 23, nor more than 30 years of age. In selecting Candidates for appointment, weight will be given to the possession of (a) a University degree in honours in science or the diploma of a recognised school of agriculture or other like distinction, (b) qualifications in a special science according to the nature of the vacancy to be filled, (c) practical experience and ability to ride, and selected Candidates have to undergo an examination by the Medical Board of the India Office as to their physical fitness for service in India.

The officers of the Indian Civil Veterinary Department perform or supervise all official veterinary work in India, other than that of the Army, and are debarré from private professional practice in India. Their duties may be divided into three classes, under the following heads—

- (a) Educational work in veterinary colleges,
- (b) Horse and mule breeding,
- (c) Cattle diseases and cattle breeding.

Appointments to this Department are made, as vacancies occur, by the Secretary of State for India. Candidates must not (except on special grounds) be over 26 years of age, and must

Eccelesiastical Establishments (Church of England).

The salaries of Chaplains are—
Senior Chaplains, Rs 10,200 per annum for five years, and then Rs 12,000 per annum
Junior Chaplains, Rs 6,860 per annum for five years, and thereafter Rs 8,160 per annum until promoted to be Senior Chaplains.
Chaplains on Probation, Rs 5,760 per annum.

A Junior Chaplain becomes a Senior Chaplain after ten years' service, excluding the period of probation.

Appointments of Chaplains on Probation are made from time to time by the Secretary of State for India, as vacancies occur. Candidates for these appointments must be Priests who are between the ages of twenty-seven and thirty-four years, and have been for three years altogether in Holy Orders. Applications for nominations should be submitted to the Secretary of State.
A Chaplain will be on probation for three years (a). If confirmed in his appointment at the end of that period, he will be admitted as a Junior Chaplain.

THE UNITED STATES OF AMERICA

1115 1116 1117 1118 1119 1120 1121 1122 1123 1124 1125 1126 1127 1128 1129 1130 1131 1132 1133 1134 1135 1136 1137 1138 1139 1140 1141 1142 1143 1144 1145 1146 1147 1148 1149 1150 1151 1152 1153 1154 1155 1156 1157 1158 1159 1160 1161 1162 1163 1164 1165 1166 1167 1168 1169 1170 1171 1172 1173 1174 1175 1176 1177 1178 1179 1180 1181 1182 1183 1184 1185 1186 1187 1188 1189 1190 1191 1192 1193 1194 1195 1196 1197 1198 1199 1200 1201 1202 1203 1204 1205 1206 1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217 1218 1219 1220 1221 1222 1223 1224 1225 1226 1227 1228 1229 1230 1231 1232 1233 1234 1235 1236 1237 1238 1239 1240 1241 1242 1243 1244 1245 1246 1247 1248 1249 1250 1251 1252 1253 1254 1255 1256 1257 1258 1259 1260 1261 1262 1263 1264 1265 1266 1267 1268 1269 1270 1271 1272 1273 1274 1275 1276 1277 1278 1279 1280 1281 1282 1283 1284 1285 1286 1287 1288 1289 1290 1291 1292 1293 1294 1295 1296 1297 1298 1299 1300 1301 1302 1303 1304 1305 1306 1307 1308 1309 1310 1311 1312 1313 1314 1315 1316 1317 1318 1319 1320 1321 1322 1323 1324 1325 1326 1327 1328 1329 1330 1331 1332 1333 1334 1335 1336 1337 1338 1339 1340 1341 1342 1343 1344 1345 1346 1347 1348 1349 1350 1351 1352 1353 1354 1355 1356 1357 1358 1359 1360 1361 1362 1363 1364 1365 1366 1367 1368 1369 1370 1371 1372 1373 1374 1375 1376 1377 1378 1379 1380 1381 1382 1383 1384 1385 1386 1387 1388 1389 1390 1391 1392 1393 1394 1395 1396 1397 1398 1399 1400 1401 1402 1403 1404 1405 1406 1407 1408 1409 1410 1411 1412 1413 1414 1415 1416 1417 1418 1419 1420 1421 1422 1423 1424 1425 1426 1427 1428 1429 1430 1431 1432 1433 1434 1435 1436 1437 1438 1439 1440 1441 1442 1443 1444 1445 1446 1447 1448 1449 1450 1451 1452 1453 1454 1455 1456 1457 1458 1459 1460 1461 1462 1463 1464 1465 1466 1467 1468 1469 1470 1471 1472 1473 1474 1475 1476 1477 1478 1479 1480 1481 1482 1483 1484 1485 1486 1487 1488 1489 1490 1491 1492 1493 1494 1495 1496 1497 1498 1499 1500 1501 1502 1503 1504 1505 1506 1507 1508 1509 1510 1511 1512 1513 1514 1515 1516 1517 1518 1519 1520 1521 1522 1523 1524 1525 1526 1527 1528 1529 1530 1531 1532 1533 1534 1535 1536 1537 1538 1539 1540 1541 1542 1543 1544 1545 1546 1547 1548 1549 1550 1551 1552 1553 1554 1555 1556 1557 1558 1559 1560 1561 1562 1563 1564 1565 1566 1567 1568 1569 1570 1571 1572 1573 1574 1575 1576 1577 1578 1579 1580 1581 1582 1583 1584 1585 1586 1587 1588 1589 1590 1591 1592 1593 1594 1595 1596 1597 1598 1599 1600 1601 1602 1603 1604 1605 1606 1607 1608 1609 1610 1611 1612 1613 1614 1615 1616 1617 1618 1619 1620 1621 1622 1623 1624 1625 1626 1627 1628 1629 1630 1631 1632 1633 1634 1635 1636 1637 1638 1639 1640 1641 1642 1643 1644 1645 1646 1647 1648 1649 1650 1651 1652 1653 1654 1655 1656 1657 1658 1659 1660 1661 1662 1663 1664 1665 1666 1667 1668 1669 1670 1671 1672 1673 1674 1675 1676 1677 1678 1679 1680 1681 1682 1683 1684 1685 1686 1687 1688 1689 1690 1691 1692 1693 1694 1695 1696 1697 1698 1699 1700 1701 1702 1703 1704 1705 1706 1707 1708 1709 1710 1711 1712 1713 1714 1715 1716 1717 1718 1719 1720 1721 1722 1723 1724 1725 1726 1727 1728 1729 1730 1731 1732 1733 1734 1735 1736 1737 1738 1739 1740 1741 1742 1743 1744 1745 1746 1747 1748 1749 1750 1751 1752 1753 1754 1755 1756 1757 1758 1759 1760 1761 1762 1763 1764 1765 1766 1767 1768 1769 1770 1771 1772 1773 1774 1775 1776 1777 1778 1779 1780 1781 1782 1783 1784 1785 1786 1787 1788 1789 1790 1791 1792 1793 1794 1795 1796 1797 1798 1799 1800 1801 1802 1803 1804 1805 1806 1807 1808 1809 1810 1811 1812 1813 1814 1815 1816 1817 1818 1819 1820 1821 1822 1823 1824 1825 1826 1827 1828 1829 1830 1831 1832 1833 1834 1835 1836 1837 1838 1839 1840 1841 1842 1843 1844 1845 1846 1847 1848 1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866 1867 1868 1869 1870 1871 1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933

THESE THINGS BEING DONE, THE

Heads of Training Colleges, and occasionally to these appointments is ordinarily Rs 400 a month rising by annual increments of Rs 20 a month to Rs 500 a month. The Secretary of State is sometimes requested by the Government of India to supply persons to fill temporary vacancies in the Indian Education Department.

The Secretary of State for India in Council makes appointments of Probationers for the Indian Forest Service, according to the numbers annually required.

Candidates must be not less than 19 but under the age of 22 years

Candidates must have obtained a degree with Honours in some branch of Natural Science in a University of England, Wales or Ireland, or have passed the Royal Bachelor of Science Examination in Pure Science in one of the Universities of Scotland. A degree in Applied Science will not be considered as fulfilling these conditions. Candidates will be required to produce evidence that they have a fair knowledge of either German or French.

The ordinary period of probation will be two years. During that time probationers will be required to pass through the Forestry course at one of the following Universities—Oxford, Cambridge or Edinburgh (subject to the arrangement of a suitable course)—becoming members of that University, if not so already, to obtain the Degree or Diploma in Forestry, which it grants, and to satisfy such other tests of proficiency as may be deemed necessary.

During the vacations, the Probationers will, under the direction and supervision of the Director of Indian Forest Studies appointed by the Secretary of State for India in Council, receive practical instruction in such British and Continental forests as may be selected for the purpose.

The Secretary of State for India in Council will make payments to each Probationer at the rate of £120 annually, not exceeding a total of £240.

Probationers who obtain a Degree or Diploma in Forestry, and also satisfy such other tests of proficiency as may be prescribed, will be appointed.

	Rs	Rs
1 Director .	2,000	
16 Superintendents —	1,000	Rs
For the first five years	rising by	80 to 1,400
1 Chemist	" "	
1 Therapist	750	30 " 1,000
	500	50 " 1,000

Scale of Pension		Years of Completed Service	20 to 24	25 and above
Minimum	Limit of Pension			
Sixteenths of Average Emoluments				
			Rs 4,000 a year	Rs 5,000 a year

Rs

1	Inspector-General of Forests	2,650 a month.
1	Assistant Inspector-General	
2	Chief Conservators (Burma and Central Provinces)	2,150
22	Conservators, in three grades (including Forest Research Dept., Forest Institute and College)	1,900
187	Deputy and Assistant Conservators	1,700
		1,500

{ Recpeo- tively

Department, provided they are of sound constitution and free from physical defects which would render them unsuitable for employment in the Indian Forest Service.

Royal Indian Marine

• All first appointments of executive officers in the Royal Indian Marine are made by the Secretary of State for India

The limits of age for appointment to the junior executive rank, that of Sub-Lieutenant, are 17 and 22 years, and no candidate will be appointed who does not possess the full ordinary Board of Trade certificate of a Second Mate, certificates for foreign going steamships will not be accepted

PAY AND ALLOWANCES

The present establishment of officers of the Royal Indian Marine and their allowances are as follows—

32 Commanders on pay ranging from Rs 350 to Rs 500, in per messum addition to staff or command pay

72	Lieutenants on completing eight years' seniority	On Rs 300
	Lieutenants on completing six years' seniority	On Rs 250
	Lieutenants on completing three years' seniority	On Rs 200
	Sub-Lieutenants under three years' seniority	On Rs 150
	Sub-Lieutenants	On Rs 125
	Sub-Lieutenants	On Rs 100
	perensem.	

In addition, 3 Commanders and 8 Lieutenants are at present employed in the Marine Survey of India

A certain number of Shore, Port, and Marine Survey appointments are usually reserved for officers of the Royal Indian Marine. The numbers so reserved and the allowances attached (in addition to pay of grade), are as follows—

Allowances per messum		Rs	
4 Shore appointments	400—1000	16 Port appointments	320—870
per messum		Rs	
11 Marine Survey appointments	4—20		

The sanctioned establishment of the Engineers branch of the Marine numbers 82, of whom, at present, 10 are Chief Engineers, and the remainder Engineers and Assistant Engineers

months of such wounds having been received, or from illness brought on by fatigue, privation or exposure, incident to active operations in the field before an enemy, within six months after their having been

(b) The sons of officers of the Indian Army, who have attained the breast substantive rank of Major or Lieutenant Colonel, and have performed long or distinguished service in Honorary King's Commissioned corps with no pecuniary advantage

Queen Alexandra's Military Nursing Service for India.

The Nursing establishment is for duty with British officers and soldiers, and at present consists of—

- 1 Lady Superintendent
- 21 Nursing Sisters

The numbers in these grades are subject to allocation

Nursing Sisters at the time of appointment must be over 27 and under 32 years of age. Candidates for the service must have had at least three years' preliminary training and served combined in the wards of a British general hospital or hospital of not less than 100 beds in which adult male patients receive medical and surgical treatment, and in which a staff of

The duration of a term of service, for all grades of lady nurses, is five years. A lady nurse who has been pronounced by a medical board to be physically fit for further service in India, may be permitted to re-engage for a second and third term at the option of the Government, and again for a fourth term, until the age of compulsory retirement, if in all respects efficient and if specially recommended by the Commandant in Chief in India. But a lady nurse will not under any circumstances be permitted to remain in the service in the grade of Lady Superintendent beyond the age of 55 years, or in either of the other grades beyond the age of 50 years

Rates of Pay

(In addition to free quarters, fuel, light, and punkah-pullers) Rs per messum

Lady Superintendent	300	5 years in grade	225	Senior Nursing Sister under five years in grade	200	Nursing Sister over five years in grade	200	Nursing Sister under five years in grade	175

Sterling Equivalents

N.B.—In calculating the sterling equivalents of rupee salaries drawn by Europeans appointed in England to permanent service in India, it is necessary to bear in mind that in some cases Exchange Compensation Allowance is drawn in addition to salary. This allowance is at present at the rate of 6½ per cent on the salary, subject to a maximum of Rs. 138-14-3 a month, but the rate is subject to alteration in the event of any material variation in the average rate of exchange between England and India.

The following table shows the approximate equivalent in sterling of the rupee salaries stated, (a) when Exchange Compensation Allowance is not granted, (b) when it is granted at the rate just mentioned —

Rupees per Menssem	Rupees per Annum	(a) Equivalent without E C A		(b) Equivalent with E C A		Rupees per Menssem	Rupees per Annum	(a) Equivalent without E C A		(b) Equivalent with E C A		Rupees per Menssem	Rupees per Annum	(a) Equivalent without E C A		(b) Equivalent with E C A		Rupees per Menssem	Rupees per Annum	(a) Equivalent without E C A		(b) Equivalent with E C A	
		£	₹	£	₹			£	₹	£	₹			£	₹	£	₹			£	₹	£	₹
100	1,200	80	85	650	7,800	520	552	1,600	19,200	1,280	1,360	2,900	34,800	2,320	2,431								
125	1,500	100	106	700	8,400	500	595	1,700	20,400	1,360	1,445	3,000	36,000	2,400	2,511								
150	1,800	120	127	750	9,000	600	637	1,800	21,600	1,440	1,530	3,100	37,200	2,480	2,591								
175	2,100	140	149	800	9,600	640	680	1,900	22,800	1,520	1,615	3,200	38,400	2,560	2,671								
200	2,400	160	170	850	10,200	680	722	2,000	24,000	1,605	1,700	3,300	39,600	2,640	2,751								
250	3,000	200	212	900	10,800	720	765	2,100	25,200	1,680	1,785	3,400	40,800	2,720	2,831								
300	3,600	240	255	950	11,400	760	807	2,200	26,400	1,760	1,870	3,500	42,000	2,800	2,911								
350	4,200	280	297	1,000	12,000	800	850	2,300	27,600	1,840	1,951	3,600	43,200	2,880	2,991								
400	4,800	320	340	1,100	13,200	880	935	2,400	28,800	1,920	2,031	3,700	44,400	2,960	3,071								
450	5,400	360	382	1,200	14,400	960	1,020	2,500	30,000	2,000	2,111	3,800	45,600	3,040	3,151								
500	6,000	400	425	1,300	15,600	1,040	1,105	2,600	31,200	2,080	2,191	3,900	46,800	3,120	3,231								
550	6,600	440	467	1,400	16,800	1,120	1,180	2,700	32,400	2,160	2,271	4,000	48,000	3,200	3,311								
600	7,200	480	510	1,500	18,000	1,200	1,275	2,800	33,600	2,240	2,351	5,000	60,000	4,000	4,111								

(8) Such limitations as still exist in the employment of non-Europeans and the working of the existing system of division of services into Imperial and Provincial, and generally to consider the requirements of the Public Service, and to recommend such changes as may seem expedient.

Work of the Commission—The Royal Commission visited India in the cold weather of 1912-13, and toured extensively in India, including Burma, combining their attention mostly to hearing the evidence of and relating to the Indian Civil Service. They subsequently sat in London and in October, 1913, again left for India to enquire into 28 Services other than the Indian Civil and the Provincial Services. They assembled first at Delhi on November 1st, and examined Imperial officers and witnesses from the United Provinces, the Punjab and the North-West Frontier Province. They then assembled at Calcutta in the middle of December, to hear witnesses from Bengal, Bihar and Orissa, and Burma. Early in February the Royal Commission went to Madras, and completed the tour at Bombay, where witnesses from Western India and the Central Provinces were heard. The Commission returned to England in the spring of 1914, and has drawn up a report of which publication has been delayed on account of the war.

Temporary Provisions.

In October, 1915, a Bill was introduced into the House of Lords, entitled "An Act to enable Persons during the continuance of the War, and for a period of two years thereafter, to be appointed or admitted to the Indian Civil Service without examination." The following is the text of its provisions—“(1) The Secretary of State in Council may with the advice and assistance of the Civil Service Commissioners make rules providing for the admission and appointment to the Indian Civil Service by the Secretary of State in Council, during the continuance of the present war, and for a period not exceeding two years thereafter, of British subjects possessing such qualifications with respect to age and otherwise as may be prescribed by the rules, notwithstanding that they have not been certified as being entitled for appointment as the result of examination in accordance with the regulations and rules made under section thirty-two of the Government of India Act, 1858 and section ninety-seven of the Government of India Act, 1915. Provided that—(a) not less than one-fourth of the persons admitted to the Indian Civil Service during such period as aforesaid shall be persons who have been so certified as aforesaid; and (b) a person shall not be appointed to the Indian Civil Service under the rules made under this section unless the Civil Service Commissioners certify that by such means as may be prescribed by the rules they have established themselves that in their opinion he possesses the necessary educational qualifications.” The provisions as to the laying before Parliament of regulations and rules made under

has, as a rule, nearly completed the 25 years are still posts to which he can look forward for promotion. On the one hand, he may become a Commissioner or even a Member of Council, and on the other, there are judicial Commissionerships and seats on High Court Benches. Such is the normal career of a Civilian, but this, by no means, completes the account of his prospects, for nearly one-fourth of the service is, as a rule, employed in posts—some reserved and some not—out of the regular line. A number of Civilians are employed in the Imperial and Provincial Secretariats, some are in political employ in the Native States, others hold responsible positions in the Customs, Police, Salt, Post Office and other departments, or supervise big municipalities and public trusts. The Civilian may retire after 25 years' service and in the ordinary way must retire on reaching the age of 55. He contributes throughout his service to a pension which is fixed, regardless of whether he has risen to be a Lieutenant-Governor, or has remained at the foot of the ladder. Every Civilian, moreover, married or single, subscribes to an annuity fund which provides for the widows and orphans of deceased members of the service.

Public Services Commission

In July, 1912, it was announced that the King had been pleased to approve the appointment of a Royal Commission to examine and report upon the Public Services in India. The Royal Commission was constituted as follows—

Chairman—The Right Hon. Lord Islington, K.C.L.G.
The Earl of Ronaldshay, M.P.
Sir Murray Hamnicks, K.C.S.I., C.I.E., Indian Civil Service
Sir Theodore Morrison, K.C.I.E., Member of the Council of India
Sir Valentine Chitrol
Frank George Sly, Esq., C.S.I., Indian Civil Service
Manadev Bhaskar Chaudh, Esq., C.S.I., Member of the Governor of Bombay's Executive Council
Gopal Krishna Gokhale Esq., C.I.E., Member of the Viceroy's Legislative Council
Walter Gullay Madge, Esq., C.I.E., Member of the Viceroy's Legislative Council
Abdur Rahim, Esq., Judge of the Madras High Court
James Ramsay MacDonald, Esq., M.P.
Herbert Albert Laurens Fisher, Esq., Fellow and Tutor of New College, Oxford

The Terms of Reference were as follows—
 To examine and report upon the following matters, in connection with the Indian Civil Service, and other civil services, Imperial and Provincial—
 (1) The methods of recruitment and the systems of training and probation,
 (2) The conditions of service, salary, leave, and pension

The Government of the United States has been informed that the Government of the Republic of China has decided to send a mission to the United States to study the economic and financial situation of the United States. The mission is composed of several members, including the Vice Premier of the Republic of China, and is expected to arrive in the United States in the near future. The mission's purpose is to gain a better understanding of the United States' economic and financial system, and to discuss the possibility of establishing economic and financial relations between the two countries. The Government of the United States is pleased to receive this information and is confident that the mission will be successful in its objectives.

Grade Pay	Unemp'd Pay	Staff Pay	In Omitting Middle of Charge of a Regiment	In Payment Directly of a Regiment
Rs 200	Rs 200	Rs 150	Rs 125	Rs 500
Rs 175	Rs 175	Rs 150	Rs 125	Rs 600
Rs 150	Rs 150	Rs 150	Rs 125	Rs 650
Rs 125	Rs 125	Rs 150	Rs 125	Rs 700
Rs 100	Rs 100	Rs 150	Rs 125	Rs 800
Rs 75	Rs 75	Rs 150	Rs 125	Rs 900
Rs 50	Rs 50	Rs 150	Rs 125	Rs 1,000
Rs 25	Rs 25	Rs 150	Rs 125	Rs 1,100
Rs 0	Rs 0	Rs 150	Rs 125	Rs 1,200
Rs 0	Rs 0	Rs 150	Rs 125	Rs 1,300
Rs 0	Rs 0	Rs 150	Rs 125	Rs 1,400

Pensions and Half-Pay—Officers are allowed to retire on pension on completing 17 years service, the amount they receive varying with the precise number of years they have served. The lowest rate for 17 years' service is £300 per annum, and the rate for 30 years £700 per annum. The increases in pension for each additional year's service over 17 are somewhat higher in the last 5 than in the first 8 of the 13 years between the shortest and longest periods of pensionable service. All officers of the rank of Lieutenant-colonel and major are placed on the retired list on attaining the age of 55 years the greatest age to which any officer can serve being 62.

Principal Civil Appointments	Approximate Number of Appointments in each Class	Salary per Annum			
		When held by a Lieutenant-Colonel	When held by a Major	When held by a Captain	When held by a Lieutenant
Inspectors-General of Civil Hospitals ..	6	2,250-2,500			
Sanitary Commissioner with Government of India	1	2,000-2,500			
Inspectors-General of Prisons	8	1,500-2,050			
Principals of Medical Colleges	5	1,650-1,800	1,200-1,300		
Professorial Appointments	32	1,500-1,650	1,050-1,150	800-950	750
Sanitary Commissioners	8	1,250-1,800 for all ranks			
Deputy Sanitary Commissioners	13	1,450-1,600	1,000-1,100	750-900	700
Bacteriological Appointments	11	1,500-1,600	1,050-1,150	700-900	650
Superintendents of Central Lunatic Asylums	6	1,400-1,550	1,050-1,150	700-900	650
Superintendents of Central Gaols	31	1,300-1,550	850-1,050	600-850	550-650
Civil Surgeons (First Class)	37	1,300-1,450	850-950	600-750	550
Civil Surgeons (Second Class)	171	1,200-1,350	750-850	500-650	450
Probationary Chemical Examiner	1			600-750	550
Officers deputed to Plague Duty	20	1,450	1,000-1,100	750-900	700

Pilot Services

Junior Leadsman
Second Mate Leadsman
First Mate Leadsman

Second Mate Leadsman
First Mate Leadsman

As Second Officers of price Rs 135 a month
allowance of Rs 40 a month

After five years
he is allowed to
appear at all
appointments as
Mate Phor
shows exceptional
ability, and has
information on his
and

After three years' service in the Government, he was promoted to go up for a 4 years' term. He was also promoted to go up for a 4 years' term. He was also promoted to go up for a 4 years' term.

Master Pilot, and, if successful, an examination to that grade on the occurrence of a vacuum in the grade of Brant which occur from the Master Pilot.

Pilots, grade, examination, Branch Pilots, Government has reason to believe that it is not in the public interest to grant his duties prop

It arranges for the results of that examination are made available to the public, and the results of that examination are made available to the public.

circumstances tend to show that the vessel was in any way attributable to physical conditions of the Pilot

on photos - Harry, at present 50 per cent of hospital, of the Illinois

paid by Bureau for
ment of all photos to obtain
require all photos to obtain
Master Mariner's Certificate before
the Senior Master Pilot is subje

the Government of India, was then

...and the number of officers in the unit, respectively, make up the total number of officers in the unit.

orders as may be passed by the Government, etc., and in all respects he is amenable to the Government.

misconduct for any breach of such

elsewhere. In Bombay, the local Port Trust have drawn up the following proposals for getting the service

To be eligible candidates must have at least 21 years of age as on 31st March 1967 and must hold Pilot Service, and at least 21 years of age as on 31st March 1967.

...the monthly as well as the annual ...
...for form and colour as for ...
...of Trade, and also an extra form ...
...and L...

and an examination from, the Medical Officer Port, Trustees that there is no

to all applicants for admission to the Probation Department, and if it is found that the applicant is not a suitable person for admission to the Probation Department, the applicant may be refused admission to the Probation Department.

of the form - a person who has been

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DATE 08-19-2010 BY 60322 UCBAW

be repeated here, as it should dispel all doubts, and objects of the Congress.

"The objects of the Indian National Congress are the attainment by the people of India of a system of Government similar to that enjoyed by the self-governing members of the British Empire, and a participation by them in the rights and responsibilities of the Empire on equal terms with those members. The objects are to be achieved by constitutional means, by bringing about a steady reform of the existing system of administration and by promoting national unity, fostering public spirit and developing and organising the intellectual, moral, economic and industrial resources of the country."

Every delegate to the National Congress is obliged to abide by the Constitution and the rules framed under it, and his willingness to abide by the Constitution and his acceptance of the above creed is proved from which he is sent to express in writing his acceptance of the above creed. Every delegate to the National Congress is obliged to abide by the Constitution and the rules framed under it.

The Constitution

This Constitution has been in full working order since 1905. It is unalterable save by a resolution of a majority in Congress assembled. It provides a guiding or directing staff of chosen leaders selected by each province and annually re-elected from the platform of the Congress by the President, Ex-President, Secretaries and other office-bearers are nominated *ex-officio* by the name of the All India Congress Committee and the whole Committee is known as the Provincial Congress Committee on whom devolves the duty, under the constitution and the rules, of calling meetings for the election of delegates, suggesting subjects to be brought forward for the consideration of the Congress and all cognate matters. The Congress declares each year at the close of the session town or city where it is to be held begins to make all preparations fully six months before the date of the holding of the session which has hitherto invariably been during the three days immediately succeeding Christmas Day. That period is specially selected owing to the great convenience it affords to all classes of delegates in the country to attend—a convenience not offered at any other time during a year. A Reception Committee is formed with a leading person as its Chairman. That Committee divides its work among various sub-committees such as finance, correspondence, housing, feeding and so on. A band of active young persons volunteer to serve the different sub-committees. Formerly they were chiefly selected from among the student class but owing to the orders of the Government in the Education Department that students should take no active part in politics, volunteers are now wholly recruited from the circle of men of business or profession. They are well disciplined and have to obey the orders of their chief or captain. They have a heavy duty to discharge during the active session, besides receiving delegates from various centres on railway platforms and taking them down to their appointed lodgings. Volunteers are also posted among delegates to carry their messages or do such other work as may be needed. Thus their discharge honours a very important service with enthusiasm and alacrity and in a way learn discipline and the spirit of self-sacrifice. In his concluding address a President invariably makes honourable mention of the services of these Congress volunteers. The hardest work of a sub-committee consists of erecting the pendal or marquee for the holding of the Congress. A part from the delegates who generally number from 500 as a minimum to 1,000 or so as a maximum. So that the pendal is erected to contain at least 5,000 seats. There have been some notable Congresses when the number seated has come to as many as 10,000. That was the number which congregated in Bombay in 1889 when Sir William Wedderburn presided and was accompanied from London by the late Mr Charles Bradlaugh who afterwards introduced the first Reform Bill of the expanded Legislature in Parliament in 1890. Delegates had to pay a fee of Rs 20 for attendance up till 1912 but the fee has since been reduced to Rs 15. They are lodged in bungalows at their own expense, but the majority of delegates outside those of the province where a Congress is held, generally accept Congress accommodation which in smaller towns becomes a very serious and uphill task indeed. The supply of chairs and other paraphernalia is also a heavy task, but they all undertake it cheerfully as a matter of duty.

A Session

The spectacular effect of a large gathering in a capital town like Bombay or Calcutta or Madras is exceedingly pleasing, while the proceedings, the stranger visiting the Congress, whether he is accommodated on the day or the five hours a day of each of the three days are keen to attend the congress and watch its deliberations. Congress expenses at the very lowest estimate come to between Rs 25,000 and Rs 30,000 per annum. The funds are collected (a) from donations of wealthy sympathisers of the Congress Movement in the province where the Congress is held, (b) from delegations of the Congress known as the British Congress Committee, and (c) as the London organization of the Congress known as the Education Department from issue of visitors' tickets. All expenses are borne out of these funds. There is rarely a balance left, sometimes there is a deficit. The Reception Committee, as soon as convened, issues a full report of the three days' proceedings of the Congress together with a list of the delegates who attended. For a few years an industrial exhibition was held in

called it when he was Viceroy in India. As such its programme is always that the reforms cannot be gaisalid that the legislative Councils are fundamentally owing to the continuous vigorous agitation of the Congress. The first reform took place in 1892 but it was discovered in a few years that the popular elective representation was inadequate, that there was no free discussion of the budget on the principle of taxation and representation, and that the privilege of interpellation, given in 1892 needed improvement and expansion. The Morley-Minto Reforms are entirely owing to the initiation and subsequent agitation of the Congress. It was also owing to the same organisation that the salt duty has eventually been reduced from 2½ to 1½ per maund. The higher limit of exemption from the income tax was also recommended by the Congress. It uniformly advocated the importance of the construction of irrigation works in preference to railways. Its structures on the past management of famine relief have been instrumental in bringing the famine relief arrangements almost wholly owing to Congress agitation and technical have undergone an unprecedented development. Sabitration owes its present condition partly to the Congress. The hardships involved in the original drastic made to revive it. The Committee also keeps itself in communication with the India Office and often acts as a vehicle of conveying Indian opinion to the Secretary of State as such the organisation renders valuable service to the Government. The 1913-14 session held in Bombay under the presidency of Sir S. P. Sinha, one time Law Member of the Viceroy's Executive Council, was largely attended and the proceedings were marked by much enthusiasm. The President, whilst recognising that the Empire was necessary in order to still the pain in the soul of awakening India, remarked himself with those who saw that the path thither would be long and wearisome. The Congress embodied its political aspirations in the following resolution—(a) the introduction of Provincial autonomy including financial independence, (b) so as to make them truly and adequately representative of the various existing executive councils and the re-constitution of the various existing executive councils and the establishment of similar executive councils in provinces where they do not exist (d) the reform or the abolition of the Council of the Secretary of State for India, (e) establishment of Legislative Councils in provinces where they do not now exist, (f) the readjustment of the relations between the Secretary of State for India and the Government of India, and (g) a liberal measure of local self government.

It may be observed in conclusion that the British Committee

The Moslem League.

In 1906 the Indian Moslem League was established. Prior to that time the Indian Moslems had stood aloof from politics. Acting under the guidance of the greatest man they have produced, Sir Syed Ahmad, they devoted their attention to education, founding the Aligarh College with the special purpose of making up the leeway of Mohammedans in education, and left politics to the other Indian peoples. A few Mohammedans joined the National Congress and took part in its annual sessions, but the community as a whole stood aside from political movements.

In 1906 however changes occurred which impelled Indian Moslems to action. Under the Act of 1892, constituting the Indian Legislative Councils, there was no special Moslem representation and in the elections which had taken place under that Act the Moslems had for all practical purposes failed to find selection. Therefore, when the amendment of the Act and the extension of the representative principle were under discussion, they were stirred to action. They feared lest, under an academic system, adapted only to a homogeneous people, their distinct communal interests would either secure no representation at all, or only inadequate representation.

They therefore took counsel together and approached the Viceroy in deputation, headed by His Highness the Aga Khan, and presented their views in an important State paper. In this they laid stress on their position in the following passage —

"The representative institutions of the European type are new to the Indian people—many of the most thoughtful members of our community, in fact, consider that the greatest care, forethought, and caution will be necessary if they are to be successfully adapted to the social, religious and political conditions obtaining in India—and that in the absence of such care and caution their adoption is likely, amongst other evils, to place our national interests at the disposal of an unrepresentative majority."

Feeling that the Mohammedans were a distinct community, and that their interests had suffered because they had been under-represented, the deputation asked for representation on a communal basis, and for representation in accordance of their actual numerical strength on account of the peculiar and historical position of the Moslem community. This request was accepted, and the Imperial and Provincial Councils embodied the principle of Mohammedan representation on a communal basis.

First Constitution

It was felt that in view of the changed conditions the Moslems should organize their own political society for the expression of their communal policy. This was the origin of the Moslem League. The rules and regulations of the League provided for a constitution, with provincial branches, and defined the objects of the League in the following language —

"The objects of the League shall be — (a) to promote among Indian Moslems feelings of loyalty towards the British Government, and to remove any misconception of loyalty towards the British Government, and to remove any misconception of loyalty towards the British Government."

There is a branch of the Moslem League in London, of which the Right Hon. Syed Amir Ali is President. In the autumn of 1913 the London office bears respect, as the result of differences of opinion with two Indian Moslems who were visiting England, the Secretary of the League Syed Amir Ali thus described the nature of these differences, "an endeavour to capture the own view and to impose on it their organization here and to impose on it their own view."

London Branch

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This change in the constitution of the League produced much discussion and was opposed by many of the older men who had led the community. The change in the constitution of the League produced much discussion and was opposed by many of the older men who had led the community. The change in the constitution of the League produced much discussion and was opposed by many of the older men who had led the community.

(a) to promote friendship and union between the Moslems and other communities of India

(b) to protect and advance the political and other rights and interests of the Indian Moslems

(c) to protect and advance the political and other rights and interests of the Indian Moslems

(d) to protect and advance the political and other rights and interests of the Indian Moslems

(e) to protect and advance the political and other rights and interests of the Indian Moslems

(f) to protect and advance the political and other rights and interests of the Indian Moslems

(g) to protect and advance the political and other rights and interests of the Indian Moslems

(h) to protect and advance the political and other rights and interests of the Indian Moslems

(i) to protect and advance the political and other rights and interests of the Indian Moslems

(j) to protect and advance the political and other rights and interests of the Indian Moslems

(k) to protect and advance the political and other rights and interests of the Indian Moslems

(l) to protect and advance the political and other rights and interests of the Indian Moslems

(m) to protect and advance the political and other rights and interests of the Indian Moslems

(n) to protect and advance the political and other rights and interests of the Indian Moslems

Newspapers and News Agencies registered under the Press Rules and arranged alphabetically according to Station where they are published and situated.

NOTE—News Agencies are distinguished by an asterisk

Stations	Title in full	Day of going to Press
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Agra	Kayastha Hitkari Ahmedabad Samachar Coronation Advertiser Gujarati Punch Jaina Samachar Kathlawar and Mahikrantha Gazette Political Bhomiyo Prja Bandhu Rajasthan Rastan Samachar Berar Samachar Akan Times Akan News	1st, 8th, 16th, and 24th of every month Every day Wednesdays Sundays Sundays Sundays Thursdays Saturdays Fridays Thursdays Sundays Thursdays Sundays Tuesdays and Thursdays
Ahmedabad	Aligarh Institute Gazette	Wednesdays
Aligarh	Abhyudaya Hindustan Review Leader Pioneer Reuters's Telegram Company, Ltd	Fridays On first of every month Daily, except Tuesdays Daily
Amraoti	Kartavya Prasad Sindh Veer Shalo Sanjeevinee	Tuesdays Mondays Mondays
Amreli Amroha Dagerhat	Islam Gazette Itihad Jagran	Thursdays Saturdays Sundays
Bangalore	Daily Post Army and Civil News Kasim-ul-Akbar	Daily Daily Mondays and Thursdays
Bankipore	Behar Bhandu Behar Herald Beharce Express	Fridays Saturdays Daily Tuesdays, Thursdays and Saturdays
Bartol Baroda Bassein, Burma Batticaloa (Ceylon) Belgaum	Bartol Hitalsbi Shree Sayaji Vilaya Bassein News Lamp Belgaum Samachar	Sundays Thursdays Tuesdays and Fridays Every other Saturday Mondays
Bemares City	Awazal Khalk Bharat Jivan Indian Student	Every Wednesday Sundays 27th of each month Tuesdays Wednesdays Saturdays
Bhamagar Bihar (Patna) Bijapur	Jalshasan Hitkari Karnatak Valbhav	

1 2 3 4

[illegible]

Day of going to Press

[illegible]

Day of going to Press

Stations	Title in full	Day of going to Press
Quetta	Baluchistan Gazette	Wednesdays and Saturdays
Quilon	Malayali	Wednesdays and Saturdays
Rajkot	Kathiawar Times	Wednesdays and Saturdays
Rangoon	Burma Sunday Times Rangoon Gazette Rangoon Times	Sundays Daily, except Mondays Daily, except Sundays
Ratnagiri	Bakool Satya Shodhak	Saturdays and Sundays
Rawalpindi	Punjab Times Shubha Suchaka Prakash	Saturdays and Wednesdays
Satara City	Hyderabad Bulletin	Daily
Secunderabad	Hyderabad Bulletin Notice Sheet	Daily
Shahjahanpur	Sarpanch Trade Advertiser (Waper Samachar)	Daily
Shillong	Assam Advertiser	Fridays
Sholapur	Kapatarn Sholapur Samachar	Sundays
Simla	Associated Press Indian News Agency Indian War Cry News of India Pioneer Daily Bulletin Reuters Telegram Company, Limited	27th of each month Wednesdays Week days
Subhur	Sindhi	Saturdays
Surat	Apathapata Deshi Mitra Gujarati Mitra and Gujarati Arpan	Saturdays Thursdays Saturdays
Sylhet	Partidarsaka Tamalika Isham Babi	Wednesdays Saturdays Fridays
Tangail	Arundodaya	Sundays
Titchur	Lokprakasham	Sundays
Trivallia	Kerala Taraka	Wednesdays
Trivandrum	Western Star	Tuesdays, Thursdays, and Saturdays
Vizagapatam	East Coast News and Advertiser	Weekly
Wai	Modavittia Vittasar	Mondays Mondays
Yelmal	Harishore	Sundays

1. The provisions (inclusion to offence) of the Press and Registration of Books Act, 1926 shall give security, which may, however, be dispensed with by the magistrate at his discretion, that the proprietors of presses established before the passing of the Act may similarly be required to give security. If and when they are guilty of printing objectionable matter of the description to which the Act applies, and that where security has been deposited Local Government may declare such security forfeit where it appears to them that the press has been used for printing or publishing objectionable matter. When the initial security so deposited has thus been forfeited, the deposit of further security in a larger sum is required before a fresh declaration can be made under section 4 of the Press and Registration of Books Act, and, if thereafter, the press is again used for printing or publishing objectionable matter the further security deposited and the press itself may be declared forfeit.

Control over publishers of newspapers, the second main object of the Act, is provided for in a similar manner. The keeping of a printing press and the publishing of a newspaper without depositing security when required are punishable with the penalties prescribed for failure to make the declarations required by sections 4 and 5 of the Press and Registration of Books Act, 1926.

Other provisions deal with the cases of books or pamphlets printed out of India or secretly imported and transmitted by post or otherwise in India. The more efficient control over the importation and transmission of books or pamphlets printed out of India or secretly imported and transmitted by post or otherwise in India, the fourth object of the Act is attained by authorising the Local Government to declare which appears to it to contain matter of the prohibited description, and upon such a declaration the Act empowers the police to seize such articles and to search for the same.

In any case in which an order of forfeiture is passed by the Local Government, an application may be made to the High Court on the question of fact whether the matter objected to is, or is not, of the nature described in the Act. For the most part the object of the Act has been secured, as regards the local press, without recourse to the power of confiscating security.

2. The different sections of the Act have in view (i) Control over presses and means of publication, (ii) Control over publishers of newspapers, (iii) Control over the importation into British India and the transmission by the post of objectionable matter, (iv) the suppression of seditious or objectionable newspapers, books, or other documents wherever found.

As regards the first of these objects, it is laid down that proprietors of printing presses making a declaration for the first time under section 4 of the Press and Registration of Books Act, 1926 shall give security, which may, however, be dispensed with by the magistrate at his discretion, that the proprietors of presses established before the passing of the Act may similarly be required to give security. If and when they are guilty of printing objectionable matter of the description to which the Act applies, and that where security has been deposited Local Government may declare such security forfeit where it appears to them that the press has been used for printing or publishing objectionable matter. When the initial security so deposited has thus been forfeited, the deposit of further security in a larger sum is required before a fresh declaration can be made under section 4 of the Press and Registration of Books Act, and, if thereafter, the press is again used for printing or publishing objectionable matter the further security deposited and the press itself may be declared forfeit.

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Societies : Literary, Scientific and Social.

AGRICULTURAL AND HORTICULTURAL SOCIETY OF INDIA (Calcutta)—Founded 1820 Annual subscription Rs 32 Entrance fee Rs 8 *Secretary*, F H Abbott 17, Allipore Road, Allipore

AGRI-HORTICULTURAL SOCIETY OF BURMA—*Secretary*, Capt W H Allen, Victoria Park, Kandawagla

AGRI-HORTICULTURAL SOCIETY OF MADRAS—Established 1838 Quarterly subscription for members in Class A Rs 7, in Class B Rs 3 *Secretary*, P F Tyson, Mount Road, Teanampet, S. W., Madras

ANTHROPOLOGICAL SOCIETY OF BOMBAY—Founded 1886, to promote the prosecution of anthropological research in India, to correspond with anthropological Societies throughout the world, to hold monthly meetings for reading and discussing papers, and to publish a periodical journal containing the transactions of the Society Annual subscription Rs 10 *Secretary*, R P Masani, M. A., Town Hall, Bombay

ASIRIO SOCIETY OF BENGAL (Calcutta)—*Secretary*, G H Typper, M. A., 57, Park Street, Calcutta

BOMBAY ART SOCIETY—Founded 1888, to promote and encourage Art by exhibitions of Pictures and Applied Arts, and to assist in the establishment and maintenance of a permanent gallery for Pictures and other works of Art Annual exhibition every February Annual subscription Rs 10, Life Member Rs 100 *Secretary*, Prof. O V Muller, M. A., Elphinstone College, Bombay

BOMBAY BRANCH OF THE CLASSICAL ASSOCIATION—The Classical Association was started, in 1903 in London, to promote the development and maintain the well-being of classical studies The Bombay Branch was founded in 1910, it numbers 137 members, holds 5 or 6 meetings a year, and publishes a yearly Journal Subscription Rs 6 for ordinary and Rs 2-8-0 for associate members

BOMBAY NATURAL HISTORY SOCIETY—Founded 1883, to promote the study of Natural History in all its branches The Society has a membership of about 1700 and a small museum with a representative collection

The following table shows the growth in the past few years in India & Burma —

CIRCULATION OF THE B E B S IN INDIA

Auxiliaries		Total copies of Scriptures			
1910	1911	1912	1913	1,094,330	1,059,926
Calcutta	123,899	191,809	184,753	178,720	161,128
Bombay	138,907	140,852	178,720	280,552	268,688
Madras	250,273	266,915	33,946	53,946	33,958
Bangalore	22,309	186,911	212,011	186,050	212,011
North India	148,681	174,831	84,014	92,484	84,014
Burma	71,842	91,416	108,646	117,225	108,646

These returns do not include the copies which any Auxiliary has supplied to London or to other Auxiliaries and agencies during the year

tion of the different vertebrates and invertebrates found in the Indian Empire which contains articles on different natural history subjects as well as descriptions of new species and local lists of different orders in the more recent numbers serial articles on game birds, common snakes, and common butterflies have been appearing Annual subscription Rs 15 Entrance fee, Rs 10, *Honorary Secretary*, W S Millard, *Care of*, N B Kinnear, Office and Museum, 6, Apollo Street, Bombay

BRITISH AND FOREIGN BIBLE SOCIETY—Since 1811 the British and Foreign Bible Society has been at work in this country It has 6 Auxiliaries in India and an agency in Burma The first Auxiliary was established in Calcutta, in 1811, then followed the Bombay Auxiliary in 1813, the Madras Auxiliary in 1820, the North India Auxiliary in 1846, the Punjab Auxiliary in 1863, the Bangalore Auxiliary in 1875, while the Burma agency was founded in 1899 The Bible or some portion of it is now to be had in 80 different Indian languages and dialects and the circulation throughout India in 1913 The Bibles, Testaments, and Portions in the various Vernaculars are sold at rates which the very poorest can pay, and at considerable loss to the Society Grants of English Scriptures are made to Students who pass the various University examinations, whose applications are counter-signed by their Principals, as under —

The 4 Gospels and the Book of Acts in 1 Vol to Matriculates

The New Testament and Psalms to Intermediate, The Bible to Graduates

Last year no fewer than 9,000 volumes were so distributed Portions of Scriptures in the important Vernaculars have been prepared in raised type for the use of the Blind and large grants of money are annually given to the different Missions, to enable them to carry on Bible-work and Foreign Bible Society, besides the British and Foreign Bible Society, there is Bible work carried on, in India, Assam and Burma in a much smaller way by the Bible Translation Society—which is connected with the Baptist Missionary Society—the American and Canadian Baptist Mission, the National Bible Society of Scotland, and the Tranquebar Tamil Bible Society

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BOWEN—Chairman, Mr. L. H. Saville
 Secretary, Mr. W. S. White
 DENNETT—Chairman, Mr. H. R. Irwin
 Secretary, Mr. G. W. Warrington Hardy
 DUFFIN—Chairman, Mr. C. J. Buckley
 MOORE—Chairman, Mr. H. Child
 Secretary, Mr. J. M. White
 MADDIS—Chairman, The Hon. Mr. J. O. Hobbs
 Secretary, Mr. P. Holt
 PERRY—Chairman, Mr. W. Mait
 Secretary, Mr. L. Saunders
 MURRAY—Chairman, Mr. J. I. Murray
 Secretary, Mr. D. Westphal
 PERRY—Chairman, Mr. R. St. J. Hickman
 Secretary, Mr. H. Hickman
 TAYLOR—Chairman, Mr. R. St. J. Hickman
 Secretary, Mr. R. St. J. Hickman
 TAYLOR—Chairman, Mr. R. St. J. Hickman
 Secretary, Mr. R. St. J. Hickman

INDIAN MATHEMATICAL SOCIETY, founded in 1907 for the advancement of Mathematical studies in India. It conducts a bi-monthly journal in which papers on mathematical subjects are published and maintains a library with current mathematical periodicals in all languages and new books in the subject. The library is located in the Ferguson College, Poona, whence the journals and books are circulated to members by post. The journal is about 150 numbers from all parts of India. President Siran Kishore K Ramchandra Rao, of Poona, Vice-President Mr. E. S. Ramanujan, Poona, and Treasurer Mr. R. S. Ramanujan, Poona.

INDIAN SOCIETY OF ORIENTALISTS (Calcutta).—*Journal des Indes et de l'Asie*, P. O. Box No. 8, Calcutta.

The India Union was founded in Allahabad in 1870. Yearly examinations are held for both scholars and school-leavers in all centers, for which prizes, medals, scholarships and certificates are granted to successful candidates. Notes on the daily portions of the Interdenominational Bible Reading Association are published by the I S U in English and Vernaculars, and 50 editions of the S S and I Vernaculars, and 50 editions of the S S and I Vernaculars, and 50 editions of the S S and I Vernaculars.

I am sorry to find that the
 Committee have not been able
 to secure the services of
 the Rev. Mr. [Name] for the
 purpose of [purpose]. I am
 sure that the Committee will
 be able to find other suitable
 persons to fill the place. I
 am, Sir, very respectfully,
 Yours, Sir, [Name]

1. **ASSOCIATION**—The European Association was established in 1958 under the title of the European and Anglo-Indian League. A resolution and was re-established in 1962 under the title of the European and Anglo-Indian League. The Association has for its objects the general protection of Euro-Asian interests and the promotion of friendly relations. The Association numbers 1,570. The Head Office are at Grosvenor House, 1, Grosvenor Place, London, W. 1, England.

The Sanitation for Consumptives
 was started on June 1, 1909, and has
 been in existence ever since. Mr. Malabarji
 acted an Endowment Fund of about
 67,000 lodged with the Treasurer
 of the Endowments, under Act VI of
 1884. Nearly Rs 70,000 more
 has been deposited in the current
 National Fund. That is a large
 sum for a small colony.
 The Sanitation for Consumptives
 is a very important work, and it is
 a pity that the Government has not
 done more for it. The Sanitation
 for Consumptives is a very important
 work, and it is a pity that the
 Government has not done more for it.

The Official Organ of the Association is "The Young Women of India" which has a circulation of over 2,000 copies monthly.

This Association, which was founded by the late Sir George Williams on June 6, 1844, seeks to unite those young men who, regarding Jesus Christ as their God and Saviour according to the Holy Scriptures, desire to be His disciples, in their doctrine and in their life, and to associate their efforts for the extension of His kingdom among young men. The above is known as the "Paris Basis" of the Young Men's Christian Associations and it is world-wide. It was adopted at the first World's Convention in Paris in 1855 and re-affirmed at the Jubilee World's Convention in Paris in 1905. The aim of the Association is through its religious, educational, and physical work to cater for the needs of young men, and its policy is one of intense loyalty to the Church.

There are, as a rule, two classes of members. Any young man who is a member in full communion of any Protestant Christian Church may be an active or voting member and any young man of good character may be an associate.

The Young Men's Christian Association though relatively new to India, is spreading very rapidly. The local Associations are autonomous and governed by local Boards of Directors. These Associations, in convention elect a National Council of European and Indian laymen, who are responsible for the supervision and expansion of all forms of the Association work. Both the National Council and the local Associations employ specially trained full time Secretaries. Over two-thirds of the Secretaries are supported from funds raised in India and Ceylon. The remaining Secretaries are supported by the Associations of North America, Australia, and Great Britain, but their work is directed by committees in India, to whom their services are loaned for the time-being. The first paid Secretary came to India over twenty-five years ago, in response to an appeal from Madras. Soon afterwards the National Council was organised, and has become increasingly so in indigenous institutions. There are now 10 Associations with 11,200 members. Of these about one quarter are Europeans and three-quarters are Indians, of whom over half are non-Christians. The following Associations own one or more buildings which serve as the local headquarters—Allahabad, 2, Bangalore, 1, Alleppee, 1, Bombay, 4, Calcutta, 5, Calicut, 1, Colambore, 1, Colombo, 1, Galle, 1, Hyderabad, 1, Jubbulpore, 1, Karachi, 1, Lahore, 1, Madras, 1, Mandalay, 1, Maymyo, 1, Nagpur, 1, Naini Tal, 1, Rangoon, 3, Secunderabad, 1, Simla, 1, In addition to buildings owned by the Association, bungalows have been rented to serve as headquarters in the following stations—Amnargarh, 1, Allahabad, 1, Banar, 2, Colombo, 2, Delhi, 1, Feroz-pore, 1, Hyderabad, 1, Jampur, 2, Lucknow, 1, Jubbulpore, 1, Lahore, 2, Lucknow, 1.

The department of the National Council are Architectural and Physical. The Student Christian Association is affiliated to the National Council and has branches in more than two score Colleges. The Railway Department is responsible for the development of Associations amongst railway employees. At Jampur the railway institute and apprentices Engineers-Club are operated by the Y. M. C. A. The Rural Department is organising villages Y. M. C. A.'s and co-operative credit societies and promoting cottage industries. The Literary Department maintains three Secretaries—J. N. Farquhar for Hinduism, K. J. Samuders for Buddhism and H. A. Walter for Muhammadanism. The object of the department is to promote of a proper and sympathetic understanding of the non-Christian religions and show their relationship to Christianity. At the beginning of the war there were but three Army Associations and five Army Secretaries in the whole of India. Now Association privileges are provided for British Troops in eighteen cantonments under the direction of thirty-six Secretaries and Assistants. Five Secretaries have been sent to organise Soldiers-Clubs in Mesopotamia, and thirty-eight Secretaries have been sent to serve the Indian Expeditionary Force A in Europe. In addition to organising Y. M. C. A.'s school boys, the High School Department arranges for holiday camps for boys and high school teachers. The National Council employs its own architects who plan and construct its buildings, hostels, and playgrounds. The Physical Department specialises on physical education and is promoting the playground movement.

The headquarters of the National Council is 80, College Street, Calcutta. The officers are—

Patron—His Excellency Lord Hardinge of Penshurst, Viceroy and Governor-General of India.
Chairman—Raja Sir Harman Singh, K. O. B.
Treasurer—W. R. Gourlay, Esq, I. C. S., Government Place, Calcutta.
Joint Treasurer—L. Robertson, Esq, I. C. S., General Secretaries—E. C. Carter, A. O. Hart, K. T. Paul.

The Bombay Association now possesses four well-equipped buildings—Wodehouse Road, Lamington Road, Resch Street, and Heynolds Road. The President is Mr. D. M. G. Canna. In connection with each building there is a well managed hostel, one for Anglo-Indian apprentices, one for Indian students, one primarily for European business men, and one for Indian Christians. The Elton Hockey Tournament and the Concor Tennis Tournament are held annually under the auspices of the Bombay Association.

Madras, 1, Madurai, 1, Mhow, 1, Palamcottah, 1, Aligarh, 1, Poona, 1, Pudukottah, 1, Rangoon, 1, Tirvandrum, 1.

PRINCIPAL CLUBS IN INDIA.

Name of Club	Estab-lished	Club house	Subscription			Secretary
			Ent	An-nual	Mon-thly	

ABBOTTABAD	1890	Abbotabad, N W F Prov	16	Rs	Rs	Capt P M Kenne
ADYAR	1893	Madras	75	12	4	F Buckley
AGRA	1893	Agra Cantonment	50		7	Major G H C Wilkins,
AMBEDKAR	1889		32		10	Major W Cortlandt
AMAL	1893	Lushai Hills, E B and Assam	32		10	Lt-Col G H Loch
AMJER	1883	Kaiser Bagh	50		15	C Richardson
AROL	1870	Berar	100		9	H C Greenfield
ALLAHABAD	1868	Allahabad	100		9	Capt G M Routh,
AVHATOT	1894	Amritsar	20	12	7	A Mackay
BANGALORE UNITED SERVICE	1868	38, Residency Road	100		7	Major L Tennant
BAREILLY	1883	Municipal Gardens	32		9	Capt W F M.
BARISAL	1864	Backerganj, Barisal	25		12	G H W Davies
BARNACKPTN	1850	Grant Trunk Road, 8,	48		10	Major G D L Chat
BASSEIN	1881	Fyche Street, 50, Bas- sein, Burma	50		10	Comdr A Hamilton
BEGLAVY	1884	Close to Race Course	50		10	Lt Col J W Harley-
BEHARAS	1827	33, Chowringhee Road, Calcutta	300	15	13	Col W Wealens
BENGAL UNITED SER-vice	1845	29, Chowringhee Rd	150	18	10	C A MacKenzie
BOMBAY	1862	Rampart Row	100		6	H G Michens
BURMA	1885	Merchant Street, Ran- gon	50		6	L G Miller
BYCULLA	1833	Belasis Rd, Bombay	200	12	10	W F Pechey
CALCUTTA	1907	13, Russell Street	100		10	D Lindsay & Sit
CALCUTTA TURE	1861	49, Theatre Road	150	25	14	J Hutcheson
CHAMBA	1891	Cawnpore	50	8	14	Major Lawrenson
CHITTAGONG	1878	Pioneer Hill, Chitta- gong	50		10	Comdr E Gray
CLUB OF CENTRAL INDIA	1885	Minow	50		8	Major Charles T
CLUB OF WESTERN INDIA	1865	Elphinstone Road,	200		6	Major N Leshie
COCOA	1876	Poona	50		5	Frederic A Cox,
COMBATORE	1867	Coimbatore	70		10	L H Deane
COONOR	1894	Coonor, Nilgiris	50	12	14	L W Stonery, C I L.
DACC	1864	Dacca	50		14	Capt E T Ingham,
DARJEELING	1868	Auckland Road	70		7	F M Trimpe
DELHI	1898	Ludlow Castle, Delhi	32		10	Lt-Col D M Da-
HIMALAYA	1841	Mussoorie	100	12	50	R. S Wahab
JHANSI	1887	Next to Public Gar- dens, Jhansi	50		9-8	Major W Hallam,

c.

Principal Clubs in India

509

Name of Club	Estab-lished	Club house	Subscription			Secretary
			Ent	An-nual	Mon-thly	

MADRAS	1831	Mount Road, Madras	Rs 250	Rs 92	Rs 10	Captain W B F Davidson
MADRAS	1564	Beach Road, Calcut	50	12	6	W O Wright
MADRAS	1901		100	12	10	
MADRAS	1892	Mooltan	30		12	Capt C B Denton
MADRAS	1864		100		5	Capt J O Nelson
MADRAS	1840	Ootacamund, Nilgiri Hills	150	12	5	C A Mackenzie
ORIENT		Chapaty, Bombay	150		6	Jeهانگر Dosabhoj Framjee, I S O, and A H A Simcox, I C S
PEGU	1871	Prome Rd., Rangoon	150	12	10	Capt I M Conway
PEGU	1883	Peshawar	32		10	Poole
PUNJAB	1879	Upper Mall, Lahore	150		12	A. R. Ross Redding
PUNJAB	1879	Quetta	60		15	Capt B Leicester
PUNJAB	1879	Halpin Rd., Rangoon	75	6	7	W B Clover
PUNJAB	1880	Royal Lakes, Rangoon	48		3	R H Xcomans
PUNJAB	1880	Mount Abu	50	48	8	Maj M P Corkery
PUNJAB	1880	Apollo Bunder	250	18	8	G C Plinston
SATURDAY	1883	7, Wood St., Calcutta	100		8	G Hervey
SHILLONG	1878	Northbrook Road, Shillong	50		12	C H Holder
SIALKOT	1371	Karachi	200	12	6	Capt G S Rivett-Carnac
SIALKOT	1869	Canloment	50		4	C McC Conway
SIALKOT	1885	Tuticorin	50		8	H S Norbey
SIALKOT	1866	Simla	200		8	G L Dowbiggin
UNITED SERVICE CLUB	1861	Chutter Manzil Palace	50		8	E D Hatendce
UNITED SERVICE CLUB	1589	Port Dufferin, Mandalay	50	20	8	Maj J E Hughes
UNITED SERVICE CLUB	1863	The Mall, Meerut	50		9	Duty Asst Secretary J Heynoid, Captain H Walton

The Church in India.

In the ordinary acceptance of the term, there is no established Church in India. An Ecclesiastical Establishment is maintained for large centres there exist schools of various grades as well as orphanages, for the education of Europeans and Anglo-Indians under the control of various Christian bodies. The Roman Catholic Church is homogeneously distinguished by much activity and financial generosity in this respect. Her schools are to be found throughout the length and breadth of the Indian Empire, and they maintain a high standard of efficiency. The Anglican Church comes next, and the American Methodist have established some excellent schools in the larger hill-stations. The Presbyterians are also well-represented in this field, particularly by the admirable institution for destitute children at Kallimpong, near Darjeeling. Schools of all denominations receive liberal grants-in-aid from Government, and are regularly inspected by the Education Departments of the various provinces. Thanks to the free operation of the denominational principle and its frank recognition by Government, there is no "religious difficulty" in the schools of the European and Anglo-Indian communities.

Christian Missions.

The tradition that St Thomas, the Apostle, was the first Christian missionary in India carries us no further back than the sixth century, when a community of Christians is known to have existed in Malabar. Since then the so-called Syrian Church in south-west India has had a continuous life. Except in its fanatic this Church (or rather these Churches, for the Syrian Christians are now divided into four communities) has displayed little of the missionary spirit until quite recent times. Western Christianity was first introduced into India by the Portuguese, who established their hierarchy throughout their sphere of influence, Goa being the metropolitan see of the Indies. St Francis Xavier, a Spaniard by race, took full advantage of the Portuguese power in Western India to carry on his Christian propaganda. His almost super-human zeal was rewarded with much success, but many of the fruits of his labour were lost with the shrinkage of the Portuguese Empire. It is really to the work of the missionaries of the Propaganda in the 17th century that the Papacy owes its large and powerful following in India to-day. The Roman Catholics in India number 1,901,006, of whom 379,251 were added during the decade 1901-1911. The total of "Syrian" Christians (exclusive of those who were using the Syrian liturgy, are of the Roman obedience) is 316,612, as against 218,741 in 1901. Protestant Christians (the term throughout this article includes Anglicans) number 1,686,731, an increase of 486,980 since 1901. Thus, the total number of Christians of all denominations in India is now close on four millions. In fact it probably exceeds that figure at the present moment, as these statistics are taken from the Census Report of 1911, and the rate of increase during the previous decade was nearly 100,000 per annum.

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The ecclesiastical establishments—Anglican, Roman and Wesleyan. Of these, the first two enjoy a distinctive position, in that the Chaplains of those denominations (and in the case of the first-named the Bishops) are individually appointed by the Secretary of State and rank as gazetted officers of Government. Throughout the Indian Empire there are 134 Anglican and 18 Church of Scotland chaplains whose appointments have been confirmed. The authorities in India of the Roman Catholic receive block-grants from Government for the provision of clergy to minister to troops and officers belonging to their respective denominations. The Wesleyan Methodist Church has a staff of military chaplains in India who receive working on a capitulation basis of payment by Government of all four denominations may be built, furnished and repaired, wholly or partly at Government expense. In the Anglican Communion a movement towards Synodical Government was making great progress, when, in the course of the year 1914, serious legal difficulties were encountered. The Bishops were advised that their relations with Canterbury and the Crown precluded the establishment of synods on the basis adopted by the Anglican Church in America, Japan, South Africa and other countries where it is not established by the State. It is stated that in course of time those relations may be modified so as to admit of the establishment of synodical government in India. Meanwhile Diocesan Councils are being adopted as a make-shift measure. These Councils possess synodical characteristics, but are devoid of any coercive power. So far as the European and Anglo-Indian communities are concerned the activities of the Church are not confined to public worship and pastoral functions. The education of the children of the communities is very largely in the hands of the Christian denominations. There are a few Jewish institutions such as the

The Protestant Churches made no serious attempt to evangelize India till the beginning of the nineteenth century. They have been at work in the Indian mission field for something over 100 years, and the statistical results of their efforts are given above. It is now, however, generally recognised that Christianity in India is producing indirect effects in India which tend themselves only incompletely to any sort of tabulation. The main agency of this more diffusive influence of Christianity is the missionary school and college. The Protestant missions all a considerable part in the elementary education of the country according to the *Year Book of Missions* in India, 1912, they are teaching 446,000 children in 13,204 elementary schools, mostly situated in villages. This represents one-ninth of the total of elementary schools and scholars throughout the Empire. The majority of children in these schools are non-Christians. The same is true also of the high schools and in a still greater degree of the colleges. The former number 283 with 62,600 male and 8,400 female pupils. There are 38 colleges affiliated to Universities, containing 5,488 male and 61 female students. Of these as many as 5,241 are non-Christians. From the standpoint of missionary policy much importance is attached to these agencies for the indirect propagation of the Christian faith. The statesman and the publicist are chiefly interested in the excellent moral effect produced by these institutions amongst the educated classes, and the higher educational ideals maintained by their staffs. The principal University colleges under Protestant auspices are the Madras Christian College, the Duff College, Calcutta, the Wilson College, Bombay, and the Foreman College, Lahore. All these are maintained by Presbyterian societies, either British or American. The Roman Catholics have a large number of educational institutions, ranging from small village schools to great colleges preparing students for University degrees. But the proportion of Christian students in their institutions is very much larger than in those of the Protestant bodies. The proportion of literates amongst natives of the C. M. S. in India is 166, European laymen claim a Christian community of 1,85,000 of whom 52,000 are adult communicants.

Anglican Missionary Societies.

The Church Missionary Society carries on work in India in seven different missions—the United Provinces, South India, Travancore and Cochin, Bengal, Western India, Punjab and Sind and the Central Provinces and Rajputana. The names are in order of seniority. Work was begun in what are now called the United Provinces in 1813, in the Punjab in 1851, and in the Central Provinces in 1854. The Society has always kept Evangelistic work well to the fore, but it also has important medical missions, especially on the N.-W. Frontier, and many schools of the Primary, Middle and High standards. The Church of England Zenana Missionary Society is an offshoot of the C. M. S. controlling the work of 162 missionary ladies. The number of ordained European missionaries of the C. M. S. in India is 166, European laymen 271. The Society claims a Christian community of 1,85,000 of whom 52,000 are adult communicants.

Society for the propagation of the Gospel Statistics of the work of this Society are not easily ascertained, as much of it is done through Diocesan institutions, which, while financed and managed by the S. P. G., are entirely controlled by the Diocesan authorities. The best known of the S. P. G. missions is that at Delhi, commonly called the Cambridge Mission to Delhi, carrying on educational work at St Stephen's College and School. At the College there are about 200 students under instruction, and at the High School 860. The College houses accommodate 100 students. Missions to the depressed classes exist in Burma, in the Ahmednagar District and in several parts of South India, especially in the Diocese of Tinnevely-Madras. There are 1,16,000 Indian Christians under the aegis of the S. P. G., 80 ordained European missionaries and 93 European lady workers. Other Anglican Societies—The Oxford Mission to Calcutta was started in 1850

More recent, but producing even more widespread results, is the Philanthropic work of Christian missions. Before the great famine of 1878, missionaries confined themselves almost exclusively to evangelistic and educational activity. The famine threw crowds of destitute people and orphan children upon their hands. Orphanages and industrial schools became an urgent necessity. But the philanthropic spirit is never satisfied with one kind of organisation or method. A great

are an almost negligible quantity in Protestant mission schools and colleges. These figures, however, include a large variety of colleges—about 5,000 students of both sexes. In middle and high schools they have 143,000 boys and 73,000 girls and in Uninstruction 98,000 boys and 41,000 girls are receiving have some 3,000 elementary schools in which conspicuously higher. The Roman Catholics pared with Hindus and Mahomedans it is amongst the Protestant converts, but common. The proportion of literates amongst natives of the C. M. S. in India is 166, European laymen claim a Christian community of 1,85,000 of whom 52,000 are adult communicants.

It works in the poorest parts of Calcutta and also at Barisal. There are 11 mission-priests of this Society, and 16 Sisters. In addition to its work amongst the poor, the Oxford Mission addresses itself to the educated classes in Bengal and issues a periodical called *Ephyra*, which is known all over India. The Society of St John the Evangelist (commonly known as the Convey Fathers) has houses at Bombay and Poona, and small stations in the Bombay Konkan. In Bombay its missionary work centres round the Church of Holy Cross, Umakhandi, where there is a school and a dispensary. The Christians are chiefly drawn from the very poorest classes of the Bombay population. At Poona the Society's co-operation with the Vantage Sisters and in Bombay with the All-Saints Sisters. Other Anglican sisterhoods represented in India are the Cleveleys, the All-Saints Sisters and the Sisters of the Church (Kilburn) at Madras. The St Hilda's Deaconesses' Association of Lahore carries on important educational work (chiefly amongst the domestic community) in the Punjab. The mission of the Scottish Episcopal Church at Nagpur, the Dublin University Mission at Hazaribagh, and St James', Calcutta. On combined leave. St James', Calcutta. On combined leave. Services transferred to Punjab. Archdeacon of Calcutta. On combined leave. Services transferred to Punjab. Senior Chaplains of India. Lord Bishop of Calcutta and Metropolitan.

Bengal Ecclesiastical Department.

Lefroy, Most Reverend George Alfred, D D

SENIOR CHAPLAINS

Stobor, Rev Cecil George, M A

Firminger, Venble Walter Kelly, M A, B D

Scott, Rev Sydney, S, M A

Stuart, Rev Robert William Hall, B A

Smith, Rev Joseph Frank, B A, A K C

Keeling, Rev Ernest William Phillips, B A

Dunbridge, Rev W H, M A

And 11 Junior Chaplains
Services transferred to Bihar and Orissa

CHAPLAINS OF THE CHURCH OF SCOTLAND

Thomson, Rev William, M A

Presidency Senior Chaplain, St Andrew's, Calcutta. On combined leave

Officialing

McCaui, Rev M W, B A

Neulemann, The Most Reverend Dr Brice, S J

Chaplain, Presidency Jail

Bombay Ecclesiastical Department.

Palmer, Right Reverend Edwin James, M A

Barham, Rev C M., M A (on leave for 3 months from Archdeacon of Bombay

Commissionary

Registrar of the Diocese

Honorary Canons of Bombay Cathedral

SENIOR CHAPLAINS

Courtice, Rev George Robert Aulton, M A, B S C

Belgium "

Camp, Aden

Ahmedabad

On foreign

Mount Abu

And 17 Junior Chaplains

CHAPLAINS OF THE CHURCH OF SCOTLAND

Matthew, Rev John Crombie, M A, B D

Senior Presidency Chaplain

And 3 Junior Chaplains

CHAPLAINS OF THE CHURCH OF ROME

Jurgens, The Very Rev H

Presidency

Madras Ecclesiastical Department.

Whitehead, Right Reverend Henry, D D

Cox, Venble Lionel Edgar, M A

Howland-on, Frederic, B A, LL B

Lord Bishop of Madras
Archdeacon and Commissary and Domestic
Chaplain to the Lord Bishop
Registrar of the Diocese and Secretary
to the Lord Bishop

SENIOR CHAPLAINS

Breay, Rev. Christopher Francis, M.A.
 Bull, Rev. Edmund
 Cline, Rev. Edmund Douglas, M.A.
 Williams, Rev. Richard Herbert, M.A.
 Evans, Rev. John Hamilton
 Hatcherell, Rev. Christopher Frederic Welleseley, M.A.
 Heycock, Rev. Francis Wheaton, M.A.
 And 24 Junior Chaplains

CHURCH OF SCOTLAND

Heron, Rev. John, M.A., B.D.
 Melhuish, Rev. Neil, M.A., B.D.
 Phillip, Rev. James Gibson
 Mitchell, Rev. James Donald, M.A., B.D.
 Coopers, Rev. A.W.P., B.A.
 Kendrick, Rev. G.I.
 McFarlane, Rev. W.D., B.A.

Assam Ecclesiastical Department.

Lakhimpur
 Sibagar
 Sibsagar

Bihar and Orissa Ecclesiastical Department

JUNIOR CHAPLAINS

Prabhu, Rev. William Hamilton, M.A.
 Lockett, Rev. Henry
 Larkin, Canon Arthur Daniel
 Payne, Rev. Russell, M.A.
 Cochrane, Canon W.L.
 Moore, Rev. H.W.
 Spooner, Rev. Harold

Services placed at the disposal of the Government of India, Army Dept.

Burma Ecclesiastical Department

Ryder, The Right Reverend Rolleston Sterrett, M.A.
 Lord Bishop of Rangoon
 Archdeacon and Bishop's Commissary

SENIOR CHAPLAINS

Manyo
 On leave
 Rangoon Cantonment
 Shwabo

And 7 Junior Chaplains

Central Provinces Ecclesiastical Department.

Chatterton, Right Reverend E., D.D.
 Price, Venble C., M.A.

SENIOR CHAPLAINS

Barling, Rev. G.W., M.A.
 Anstey, Rev. H.C.S., M.A.
 Clarke, Rev. W.L., M.A.

And 14 Junior Chaplains

North-West Frontier Ecclesiastical Department

SENIOR CHAPLAIN

Campbell, Rev. R.W., B.A.

And 4 Junior Chaplains

Punjab Ecclesiastical Department.

Parman, Right Reverend H.B., M.A., D.D.
 Warlow, The Venble Edmund John, M.A.
 Hissan Ullah, The Venble

SENIOR CHAPLAINS

Nalab, Rev. Henry
 Becker, Rev. Charles Maxwell, M.A.
 Syme, Rev. James Greenhill Skottowe, M.A.
 Brookes, Rev. Joshua Alfred Howland, M.A.
 Stanley, Rev. Albert Edward, M.A.
 Musgrave, Rev. Walter, M.A.
 Stewart, Rev. Charles, B.A.
 And 19 Junior Chaplains

Eastern Himalayan district, and there is a ed at Howrah in the district of the mills, and Christian community there of over six thousand In the five mission districts of engineers and other workers in the mills

The Mission work of the Church is extended and varied. It is carried on in six centres—Poona, and the Punjab there were at the end of 1911 over 19,500 baptised Indian Christians in connection with these missions. The Women's Association of Foreign Missions does invaluable service in school, medical and zenana work, having in India 49 European missionaries, 145 teachers, over 50 schools, three hospitals and six dispensaries.

The Church of Scotland has also done much to provide education for European districts.

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BAPTIST SOCIETIES.

THE LATE THE HONORABLE SIR JAMES
two purely European congregations in India,
one in Calcutta, with a large number of
members of these congregations co-operate
with the established Church of Scotland in
providing education for European children
in Calcutta and a second congregation is maintained
by 191 students.

THE EVANGELICAL BAPTIST MISSIONARY SOCIETY
—formed in 1792, largely through the efforts
of Dr Wm Carey, operates mainly in Bengal,
Bihar, the United Provinces and the Punjab
Indian workers connected with the Society
are 167 in India in Churches, 222 Day Schools, 13
Colleges. The Church membership at the close
of 1912 stood at 11,009, and the Christian Com-
munity at 31,417. In the methods of the
Society, the chief place is given to Bazaar and
Village preaching. Increase in membership
during the past ten years, about 30 per cent
and in the Community 50 per cent for the same
period. Amongst the non-Christians great
progress has been made in recent years, and
Churches formed from amongst these peoples
are self-supporting.

Special work amongst students is carried on
in Calcutta, Dacca, Bankipore, Cuttack and
Pilib. Here, efforts have been carried for the
prosecution of this form of work.

EDUCATIONAL WORK.—Baptists from Primary
Schools to Colleges are able to bestow a theo-
logical degree granted under Royal Charter
to local degree granted under Royal Charter.

There are 9 or 10 purely English Baptist
Churches connected with the Society, but
English services are carried on in many of the

Medical work connected with the Society's work among the European population obtained reported 2 Hospitals, 7 Dispensaries, 401 in-patients, and 73,645 out-patients for the year 1912. Two large Printing Presses for the year 1912 and 75,000 copies of the English and Calcutta and Dacca

Women's Missionary Association, B. M. S.—
 Daxendav, there are 75 missionaries, 336 Indian
 workers, 102 girls' Day Schools and 5 girls'
 boarding schools in connection with this work,
 751 villages are visited annually by teachers and
 missionaries engaged in Gospel work. A large
 place is given to medical work, 5 Hospitals
 with quabbed stalls and 12 Dispensaries pro-
 viding for 1,004 in-patients, and 93,874 out-
 patients for the past year. The Indian General
 Secretary of the Women's Missionary Association
 or the Baptist Missionary Society is Miss Angus,
 44, Lower Circular Road, Calcutta.

THE CANADIAN BAPTIST MISSION—Was commenced in 1870, and is located in the East-ern Telugu District to the north of Madras. In

the Kisma Godavari, Mazagapattin, and Ganjam Districts. There are 22 stations and 162 out-stations with 15 male and 85 women workers, 5 qualified physicians, and 567 Indian workers, and 6000 preaching in villages. Organized Churches are 94, communicants 9,482, and addressers 15,099 for the past year. The Educational department are 226 village Day-schools, with 6,002 children, 8 Boarding schools, 2 High schools, a Normal Training school, a Theological seminary providing in all for 691 pupils, and an Industrial school. There are 5000 P. and two P. S. schools. The Mission publishes a village newspaper, a Mission magazine, and is held upon the work amongst women and children in particular. Numerous other decided membership has increased by 71 per cent, the Christian Community by 90 per cent, and schools by 370 per cent. The Indian Secretary is the Rev. A. A. Scott, Junr, Godavari District.

THE AMERICAN BAPTIST FOREIGN MISSIONS
 —was commenced in the year 1836, and covers
 large parts of Andhra, Gunjur, Kistna, and
 Kanool Districts, and parts of the Deccan.
 Its main work is evangelism, but there is large
 Educational and Medical work in addition.
 There is an English Church in Madras. A
 large industrial & earthenware settlement is carried
 on at Rayal nad under the charge of one of the
 missionaries. Organized (Tamil) Churches, num-
 ber 123, with 66,826 baptized communicants
 There has been a net increase of 1,000 per annum
 during the past twenty years. There are 126
 Disciples and 1,671 Indian Workers. There
 is a large Theological Seminary at Marimuttam
 for the training of Indian pastors and a Bible
 school at Vengaloor for training Bible Women.
 In ordinary educational work 601 day schools,
 26 Boarding schools and 4 High Schools give
 training to 18,377 scholars. In Medical work
 5 Hospitals report 1,501 in-patients and 19,883
 out patients for the year

Corresponding Secretary, Prof. I. L. Martin,
 Andhra, Gunjur District

AMERICAN BAPTIST FOREIGN MISSION SOCIETY, organized in 1814, has Missions in Burma begun 1814, Assam 1836, Bengal and Orissa 1836, South India 1840. It owes its rise to the celebrated Adoniram Judson. Until 1910 the Society was known as the American Baptist Missionary Union. There are 31 main stations, in Burma 14 in Assam, 9 in Bengal and Orissa, 2 in South India, besides hundreds of out-stations. All forms of missionary enterprise come within the scope of the Society.

The great work of the Mission continues to be evangelistic and the triumph of the native preachers and Bible-women, and extends to many races and languages, the most important of which, in Burma, has been the practical transmission of the Karens, whose language has been reduced to writing by the Mission. The work in Assam embraces 9 different languages, and large efforts are made amongst the employers on the tea plantations. The Mission Press at Kampong is said to be the largest and finest in Burma. The American Baptist, Bengali Mission and the American Baptist, Bengali Orissa Mission are branches of the above.

Assam
Lassam Secretary, Rev. J. Hudson Little, Gauhati,
Burnet Secretary, Rev. H. J. Marshall, Tharata-
waddy, Burma
Bengal and Orissa Secretary, Rev. Howard
Murphy, M. D., Midnapore, Bengal
South India (or Telugu) Secretary, Rev. W. A.
Stanton, D. D. Kurnool, Kurnool District,
S. India
THE TASMANIAN BAPTIST MISSION—With
3 missionaries, is established at Sirazunge,
T. Bengal
Secretary, Rev. L. T. Thompson, Mission
House, Sirazunge
THE AFRICAN BOARD OF BAPTIST MISSION-
MISSIOnS.—Embracing the societies represent-
ing the Baptists of the Africa-Commonwealth
in connection with the field of operations in
west-India. The staff numbers 6 in full-time
work.—There are 1,461 communicants and 1
(Christian community of 2,870
Secretary of the Council, Rev. H. H. Bailey, Milton,
T. N. Mission House, Albany, N. H. English
The SACRED BAPTIST MISSION—Has 10
Missionaries, and 86 Indian Workers in Madras,
W. and the French District Communities,
number 120, organized Churches 4, Elementary
schools 23, with 1,200 pupils
Secretary, Rev. E. A. Booth, Kilgus, Madras,
T. N. India

AMERICAN BAPTIST, BENGAL-ORISSA MISSION
commenced in 1836 Area of operation, Midnapore and Balasore districts of Lower Bengal Mission staff 29, Indian workers 264 One English Church and 24 Vernacular Churches, Christian Community 6,000 One hospital and two dispensaries Educational One Theological and

PRESBYTERIAN SOCIETIES.

The Hospital at Mirat, under the care of Dr W J Wallis and Dr C E Wallis is well known throughout the whole of S W India, and the Forman Christian College at Lahore under the principalship of Rev J C R Ewing, D D, C L E, is equally well-known and valued in the Punjab The Allahabad Christian College (Dr C A R Danyer, Principal) is growing rapidly and its mechanical and agricultural departments have become increasingly prominent Principal Miss A Mitchell, M D, is one of the largest and most valuable institutions of this description in Northern India Secretary, North India Mission Rev R C Smith Esq., Punjab, Hasru Secretary, North India Mission Rev R C G Howard, Kodoli, S M C

The NEW ZEALAND PRESBYTERIAN MISSION—Commenced as recently as 1910 at Jagadhri, Punjab

THE IRISH PRESBYTERIAN CHURCH MISSION
Operates in Gujarat and Kathiawar with a staff of 37 missionaries of whom 4 are qualified doctors and an Indian staff of 560 including school teachers There are 25 Organized Churches a communicant roll of 1,559, and a Christian community of 5,772 In Medical work there are 2 Hospitals, 5 Dispensaries, with 1,011 in-patients and 22,171 out-patients The Mission conducts 134 vernacular schools affording tuition for 6,351 pupils, 5 Orphanages, a Divinity College at Ahmedabad A teachers' Training College for men, a Teachers' Training College for women, both at Ahmedabad, and a Mission Press at Surat The Mission has made a speciality of farm colonies, of which there are about a score in connection with it, most of them thriving The Jungle Tribes Mission with 3 missionaries is a branch of the activities of the above, working in the Ranchi Alahals and Rewa Kantha districts, with farm colonies attached Secretary Rev R R Johnson, B A, Mission House, Ahmedabad

THE UNITED PRESBYTERIAN CHURCH OF AMERICA—Established in the extreme North of the Punjab, and is practically the only Mission working amongst the 9,374 cities and villages of that district Its missionaries number 78 Indian workers 718 There are 60 organized congregations with 499 outstations, a membership of 32,007, and a Christian community of 61,064 Women's Societies number 29 A theological seminary and a college & high schools, 7 middle schools, 2 industrial schools, 2,220 primary schools, contributing in all 12,315 pupils In medical work there are 4 hospitals and 7 dispensaries with 1,056 in-patients and 65,476 out-patients for 1914 Secretary Rev R Maxwell, Gujranwala

THE AMERICAN PRESBYTERIAN MISSION Operates in 5 main stations known as the Punjab North India and Western India Missions The American Staff number 191 and Indian Staff 1,508 There are 29 main stations and 149 out stations Organized churches number 53, 11 of whom are self-supporting There are 7,575 communicants and a total baptized community of 46,321 Educational work as follows: Christian Colleges, students 1,033, Theological Institutions, students 75, 10 High Schools, pupils 1,023 Industrial Schools 6 Teachers' Departments, 35 Medical Students at Mirat, 109 Elementary Schools, 190 schools of all ranks, pupils 13,224 M D, C L E Work 7 Hospitals, 12 Dispensaries, 4,743 in-patients, 18,008 out-patients visits Sunday Schools 400, with 12,227 Sunday School pupils Contributions for church and evangelistic work on the part of the Indian Church, Rs 18,820 Total Indian contributions for all purposes, including educational and Medical Rs 4,25,841

THE GERMAN EVANGELICAL SYNOD OF NORTH AMERICA—Commenced work in the C P in 1865 The mission staff numbers 23, Indian Christian workers 310, Communicants 1,815 total Christian community 4,008, Organized Churches 6, one Theological school with 10 students, one High School with 90 students and 64 other schools with 3,956 students The mission has 2 Hospitals and 6 Dispensaries which in 1914 treated 18,013 patients Secretary Rev F A Goetsch, Bismaripur

THE WELSH CALVISTIC METHODIST MISSION (OR WELSH PRESBYTERIAN MISSION) established in 1840 with a staff of 37 missionaries, 511 Native workers, occupies stations in Assam in the Khasia and Jaintia Hills the Lushai Hills and at Sylhet and Cachar The Khasia language has been reduced to writing, the Bible translated, and many books published

ALL-INDIA MISSIONS.

said to be the largest in India, and a large Printing Press the centre of the S Travancore Tract Society.

V India Secretary Rev J H Brown, B.A., B.D., Calcutta.

S India Secretary Rev D P Rice, B.A., Bangalore.

Hospital and Leprosy Asylum Special efforts are made amongst the Nama Sudras and the aboriginal tribes known as the Malyawars, Cheros and Pankas. The S India district is divided into 12 stations and 472 outstations. At Nagercoil, (Travancore) is the Scott Memorial College with 985 students, a Church and congregation.

THE SAKYAPUR AND JOHAGHAT DISTRICT BIBLE AND MEDICAL MISSIONS—Was established at Lohaghat, 48 miles from Almorah, in 1910 amongst the rich missions are the Vanguard Mission at Sanjay, Thana District, with 6 missions, and the Church of God Mission with 7 missionaries at Lahore. The Burning Bush Mission has a staff of 8 missionaries at Allahabad. The Tehri Border Village Mission is the only Christian enterprise in the Himalay in Native State of that name, its agents are stationed at Landour, and have translated portions of the New Testament into the Tehri-Garhwali language.

THE HERPZIBAH FAITH MISSIONARY ASSOCIATION has six missionaries. Agent D W Zook, Adm., B.N.H.

THE LIBERTY MISSION—Has 5 missionaries with headquarters at Darjeeling, Tibet as its objective. Secretary Miss J Fernson, Darjeeling.

THE INDIA MISSIONARY SOCIETY OF TRIPLETT (DORAKAT MISSION)—Opened in 1904, operates in the Warangal District of the Nizam's Domains. It is the missionary effort of the Tamil Christians of Tinnevely. There are now 1,550 Christians in 46 villages. Secretary Mr J Anubudhan, B.A., B.T., Palamcottah.

THE MISSION TO LEOPARDS—Founded in 1874, is an interdenominational and international society for the establishment and maintenance of asylums for leopards and homes for their untamable children, working largely in India, China, and Japan. Its work in India is carried on through co-operation with 29 missionary societies. The mission now has 40 asylums of its own with over 3,500 inmates, and is aiding or has some connection with work for leopards at 20 other places in India. In the mission's own and aided asylums there are about 3,100 Christians. The total number of leopards reached by the mission in India is about 5,000.

An important feature of the work of the mission is the segregation of the untamable healthy children of leopards from their diseased parents. 500 children are thus being segregated and saved from becoming leopards.

The mission very largely relies on voluntary contribution for its support. *Patrons*—The Dowager Dukes of Dufferin and Argyll. *President*—The Duke of Devonshire. *President*—The Duke of Devonshire. *President*—The Duke of Devonshire.

THE CHRISTIAN AND MISSIONARY ALLIANCE—Dates from the year 1893 under the name of the India Missionary Alliance, but a number of its missionaries were at work in Berar Province much earlier. The work is continued to the provinces of Berar, Khandesh and Gujarat. There is a staff of 72 missionaries and 75 Indian workers. The number of stations is 20, with additional outstations. There are 4 orphanages, 2 for boys and 2 for girls. Training schools for Indian workers and 1 English congregation at Bhusawal. Secretary Rev E H Carner, Khamgaon, Berar.

THE CHURCH OF THE BRETHREN (AMERICAN)—Opened work in 1895, and operates in the Southern part of Gujarat, Khandesh, and Thana Districts. Its staff numbers 29 including missionaries' wives, and 105 Indian workers. The baptised membership stands at 1,125, education is carried on in 2 girls' boarding schools, 4 boarding schools for boys, and 81 village day schools. Industrial work is connected with four of the schools, and a farm colony is established at Lumballa.

THE POONA AND INDIA VILLAGE MISSION—Founded in 1893 operates in the Poona, Satara and Sholapur Districts, with 25 European and 32 Indian workers. The number of Indian Christians is 40. The main work is evangelism of the villages, with women's Zeana work, and village schools. There are 4 village dispensaries, including a large medical work in the great pilgrim-age city of Pandharpur, and a hospital at the headquarters of the mission, Narsapur, in the Bhosle State. Secretary Mr J W Stead, Narsapur, Poona District.

THE AMERICAN CHURCHES OF GOD MISSION—Has two missionaries at Bogra, Bengal. **THE INDIA CHRISTIAN MISSION**—Founded in 1893, has 31 Organized Christians, 11 missionaries, 38 village stations, 106 Com-municants, and 28 Primary schools in the Mhow district. S India Stations also in Berenag, Khamgaon, N India, and Nwara Ely, Ceylon, Sri Lanka, A S Pwter, Nwara Ely, Ceylon.

THERE ARE 3 PENTECOSTAL MISSIONS at work. The Pentecostal Mission in W Kham-gaon and Thana Districts, the Pentecostal Church of the Nazarene Mission at Buldana, Berar, and the Pentecost Bands of the World Mission, and a Boys' Orphanage at Boudi. **LOHARI C P** and a Girls' Orphanage at Rajpura, and a Boys' Orphanage at Boudi.

THE PENTECOSTAL MISSIONS—Is engaged mainly with orphan children and over 100 Christians in all stations. Director Rev J C Law and Dharma Dun.

THE REGIONS REVISED MISSIONARY UNION—An interdenominational Society commenced work at Mohabar, Dehar, in 1900, and now occupies 4 stations and 7 outstations in the Champarn and Saran Districts, with a staff of 10 missionaries. Secretary for India Mr W H P. Anderson, Secretary, Mr John Jackson, F.R.S., 30, Henrietta Street, Covent Garden, London.

THE PENTECOSTAL MISSIONS—Is engaged mainly with orphan children and over 100 Christians in all stations. Director Rev J C Law and Dharma Dun.

THE PENTECOSTAL MISSIONS—Is engaged mainly with orphan children and over 100 Christians in all stations. Director Rev J C Law and Dharma Dun.

of 13 Europeans, and 31 Indian workers. There are 51 Elementary schools, with 617 pupils, a Girls' and a Boys' Orphanage and Boarding school, communicants number 50.

INDIA—ESTABLISHED 1903, it has a staff of 21 Indian missionaries, operates in Karwar, Chota (Punjab) and Omhal (Madras) Communities number 125, Christian community 1,500, Elementary schools 10, Dispensary, B. I. T., Madras S. W.

THE SEVENTH DAY ADVENTISTS—ESTABLISHED 1892 have 44 missionaries in various parts of India. Communicants, 221, Christian community, 1,031, Churches, 2, Dispensary 2, schools, 4, Hospitals, 2, Dispensary 2, patients 150. **Secretary** Rev. J. I. Shaw, Kirkee Hill House, Pune.

THE AMERICAN METHODIST MISSION—ESTABLISHED 1899, works in the C. Provinces. Mission staff number 20, Indian workers 80, Church members 530, 1 Industrial Training Institution, 1 High School, 1 Bible School, 2 Orphanages, 1 Widow, Home, Dispensary, Hospital 1, Superintendent Rev. W. C. Lapp, P. O. Dharmat, C. P.

THE METHODIST MISSION GENERAL (OVERSEAS)—ESTABLISHED IN 1901 in the C. Province. Orphan and village work carried on from the Lepet. 11, Lepet, Medical Secretary Rev. P. W. Penner, Jangur, C. P.

THE KAREK AND CENTRAL INDIA HILL MISSION—ESTABLISHED 1890 in the C. P. and Berar, has a mission staff of 22, Indian workers 17, Churches 7, Communicants 105, Christians community 550, 2 Boarding 1 Industrial Training school, with 114 pupils.

SECRETARY Mr. Carl W. Snyder, Ellichpur, Berar. **THE CENTRAL AND INDIA GENERAL MISSION—ESTABLISHED 1893**, occupies stations in India in the Comorant and Anantapur Districts. Mission staff, 23, Indian workers, 50 Churches 10, with Communicants 250, and Christian community 678. Orphanages 3, Elementary schools 14, pupils 352.

SECRETARY Rev. D. Logan, Coonoor, Nilgiris. **THE BOYS' CHRISTIAN HOME MISSION—OWES ITS EXISTENCE TO A PERIOD OF 1890**, commenced in 1899. Mission staff 5, Indian workers, 20. There are two Elementary schools with 80 children, Orphans at Dhond Bahraich and 207 in the Homes at Dhond Bahraich and Oran, where Industrial Training is given. **Director** Mr. Albert Norton, Dhond, Poona Dist.

Ladies' Societies
ZENANA BIBLE AND MEDICAL MISSION—THIS IS AN INTERDENOMINATIONAL SOCIETY, WITH HEADQUARTERS IN LONDON, WORKING AMONG WOMEN AND GIRLS IN SEVEN STATIONS IN THE DOMBAY PRESIDENCY, ONE IN MADRAS, TAMILNADU IN UNITED PROVINCES, AND FIVE IN THE PUNJAB. THERE ARE 89 EUROPEAN LADIES ON THE STAFF WITH 215 INDIAN WORKERS, TEACHERS AND NURSES, AND 77 BIBLE WORKERS. DURING 1913 THERE WERE 2,216 INPATIENTS IN THE HOSPITALS SUPPORTED BY THE SOCIETY (2518 BERNERS, DAMPUR, LUCKNOW AND PATNA) AND 25,902 OUTPATIENTS IN THEIR

UNDENOMINATIONAL MISSIONS
THE CENTRAL INDIA MISSION, WITH A CHURCH, DISPENSARY AND SCHOOL IS FOUND ON THE N. W. FRONTIER CONDUCTED ON THE PART OF THE CHINESE INDIAN MISSION, AND HAS KARSTAN AS ITS OFFICE.

THE FRIENDS FOREIGN MISSIONARY ASSOCIATION WITH HEADQUARTERS AT HOUSHAM, CENTRAL PROVINCES, COMMENCED IN 1871. WORK HAS RECENTLY BEEN OPENED UP IN THE GAZIABAD AND BHOPAL STATES. THERE ARE 103 CHURCHES, 27 DISPENSARIES, 27 SCHOOLS, 103 WOMEN AND GIRLS, 1 DAY SCHOOL, ONE

DISCIPLE SOCIETIES
THE INDIA MISSION OF THE DISCIPLES OF CHRIST (FOREIGN CHRISTIAN MISSIONARY SOCIETY OF CHINA, OHIO, AND CHRISTIAN WOMEN'S BOARD OF MISSIONS OF INDIA COMBINED) COMMENCED WORK IN 1882, ITS AREA CENTRAL AND UNITED PROVINCES, NUMBER OF INDIAN CHURCHES 14 AND MISSIONS, 67. ASSISTANT MISSIONARIES, 1,392. ITS STAFF INCLUDES 7 HOSPITALS, 17 DISPENSARIES WITH 50,113 INPATIENTS AND OUTPATIENTS FOR THE PAST YEAR. THREE ORPHANAGES AND AN INDUSTRIAL HOME WITH 152 INMATES. IN CONNECTION WITH THE INDUSTRIAL WORK A FARM OF 400 ACRES HAS BEEN TAKEN AT DAMOH. THERE ARE 8 MIDDLE SCHOOLS 41 PRIMARY SCHOOLS WITH 3,120 SCHOLARS. AN ACTIVE ZENANA WORK IS CARRIED ON. THE AUSTRALIAN BRANCH HAS THREE MISSION STATIONS IN POONA DISTRICT. THE GREAT BRITAIN AND IRELAND BRANCH HAS TWO MISSION STATIONS, ONE IN MUMBAI DISTRICT, C. P., AND ONE IN PUNJAB. THE GREAT BRITAIN AND IRELAND BRANCH HAS TWO MISSION STATIONS, ONE IN MUMBAI DISTRICT, C. P., AND ONE IN PUNJAB. THE GREAT BRITAIN AND IRELAND BRANCH HAS TWO MISSION STATIONS, ONE IN MUMBAI DISTRICT, C. P., AND ONE IN PUNJAB.

Hospital with a general dispensary connected with the Mission, in addition to a self-supporting weaving community at Itarsi, and Industrial Works and a Farm Colony at Hosangabad *Secretary*, Mr Henry I Robson, Sohagpur, C P.

The American Friends' Mission with 5 Missions is working at Nowgong *Secretary*, Miss D Bistler, Nowgong, C I.

The Old Church Hebrew Mission was established in 1888, in Calcutta, and is said to be the only Hebrew Christian Agency in India *Secretary*, J W Pringle, Esq, Calcutta.

THE OPEN BRETHRENS—Occupy 46 stations in the U Provinces, Bengal S Mlatatta, Godavari Delta Kanarese, Tinnevely, Malabar Coast, Combarore and Nilgiri Districts They hold an annual Conference at Bangalore

Lutheran Societies

(Several of the German Missions mentioned below have suspended or curtailed their work)

The American Evangelical Lutheran Mission General Council, founded in 1844 for the Godavari and Kistna Districts, has its Headquarters at Rajahmundry. Its staff consists of 27, including 148 Indian Workers. The membership is 23,680. There are Boys' and Girls' Central Schools, Mission Press, a well-equipped hospital and a Depot at Rajahmundry, and a High School at Peddapur *Chinaman*, The Rev C F Kuder, M A, Rajahmundry.

The 'General Synod' Section of the above, has its headquarters in Guntur founded in 1842. Its Christian community numbers 46,594, with 16,242 communicants, 27 missionaries, showing an increase of 61 per cent during the past ten years. The following institutions are connected with the Mission, a second grade College, High school for girls, Training School, and Industrial School *Secretary*, the Rev Victor McCauley, Guntur.

THE EVANGELICAL NATIONAL MISSIONSARY SOCIETY OF SWEDEN, founded in 1856, occupies the districts of Bellu, Chindawara and Sangor in the Central Provinces. There are 1,600 staff numbers, 53 including women, with an Indian staff 150. Schools number 41 with 1,555 children. Only two of the schools are secondary, all the rest are Primary Schools. There are small dispensaries at most of the stations *Secretary*, Rev A G Danielsson, D D, Chindawara, C P.

The Hermannsburg Evangelical Lutheran Mission began its work in India in 1866 and operates in the South Kallora, the East Chittore and South East Caddapa Districts. There are 22 Indian Churches, 1 European Missionaries and 178 Indian workers, Church numbers 70 girls, in a fourth, in addition to Zennara and Educational schools 1 High school, 1 Lower Elementary school, 2 Higher grade schools, and 2 Theological Seminary is stationed at Kodur with a Dispensary, and a large Industrial school at Nayadupla. Since the beginning of 1914 a

part of the field of the Hermannsburg Mission has been ceded to the E.V. Luth. Joint Synod of Ohio and other States in U S America, who had expressed the wish to enter the field. Kodur and Puttur with the Lepet Asylum at Kodur were ceded to them with 2 European missionaries, 26 Indian workers and 434 church members. The Hermannsburg Missions Secretary is as yet acting for the Ohio Mission also *Secretary*, Rev J Rohwer Gundry, Nellore Dist, Madras.

The Schleswig Holstein Evangelical Lutheran Mission, commenced in 1864, operates in the Vizagapatnam District. There are 12 stations, a total Missionary staff of 44, with 441 Indian workers. The growth in the Christian population has been from 1,530 in 1901 to 16,550 in 1914. Communicants number 4,140, and Catechumens 7,862. Education work comprises 1 Theological Seminary, 1 Secondary, 1 Industrial, and 100 Elementary schools, providing for 2,716 pupils. There are 9 Dispensaries with 50,000 patients for the year. English Services are held in the Mission Church at Jeypore *Secretary*, Rev J Th Timmcke, Komarpuk.

VIZAGAPATNAM

LEIPZIG EVANGELICAL LUTHERAN MISSION, GEORGE DIOCESE.—The mission commenced in 1834, and is confined to the Tamil speaking areas, chiefly in the Madras Presidency, with an Indian Minister and Church, in addition, in Rangoon. The total European staff numbers 31, ordained Indian Ministers 22 and 97 Indian workers, Organized Churches, 33 places of worship, 221, Baptised membership 18,868. There are 226 boys' schools (including 1 Training, an industrial and 4 Secondary schools) and 23 girls' schools, including an industrial school. The teaching staff numbers 494 and pupils 10,168. Zennara work is actively prosecuted. A Printing Press and Publishing House are established at Tranquebar *President* Rev Th Meyner, Kilpankur, Madras.

THE BASEL MISSION was commenced in 1834, and occupies 26 main stations and 128 outstations in the Coorg, S Malabar, Nilgiris, and N and S Canara districts of S W India. The total European staff numbers 159 with Churches, with a membership of 19,762. Educational work embraces 204 schools (including 2 Theological, 9 Boarding and 4 High schools) with 16,974 Elementary and 3,150 Secondary school pupils and 831 scholars in Boarding Institutions and Orphanages. There are good Hospitals at Bellu and Calicut under European doctors with 3 branch hospitals and 4 Dispensaries connected, 66,504 patients were treated last year. There is a Lepet Asylum at Chervayur.

The Industrial work of the Mission is second to none in India and comprises 17 establishments, embracing one mechanical establishment of a first rate order at Mangalore, 2 Mercantile branches, 7 Weaving and 7 Lile work establishments in the Kanara and Malabar districts, employs number 3,683. A large Printing Press at Mangalore issues publications in the Kanarese, Malayalam, Tulu and English languages. Owing to the interference of a number of missionaries belonging to the Basel Mission, it has been impossible to revise the above figures which are for 1914.

Secretary Rev J Schosser, Mangalore

The Church of Sweden Mission—was founded in 1871, and operates in the Madras, Tanjore, Trichinopoly and Diamond District. Sixty of the Mission works independently, through the relation ship with the Leipzig Mission. The said numbers 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837

THE WESTERN METHODIST MISSIONARY SOCIETY commenced work in India in 1817 (location in 1814) The Mission in India is organized into 10 District Synods with 8 Provincial Synods. There is a large English work connected with the Society, 20 ministers giving their whole time to literary work and English churches.

The districts occupied include 64 main stations in Bengal, Madras, Mysore, Bombay, Punjab Central Provinces, Hyderabad (Nizam's Dominions), Triplicopol and Burma. The European staff numbers 145 with 2,497 Indian workers, Communicants 18,937, and total churches 93.

Educational work comprises 4 Christian Colleges, students, 560, 10 Theological Institutions, pupils, 50, 11 Training Institutions, pupils, 96, 20 High Schools, pupils, 5,139, 71 Boarding schools, scholars, 2,478, 10 Industrial schools, pupils, 602, 1,177 In Elementary schools, with 57,338 scholars. In Medical work there are 12 hospitals, 22 dispensaries, 13 qualified doctors, 2,984 in-patients and 78,703 out-patients for the year.

The above particulars are those published

Methodist Societies

The vernacular Protestant Church began its Indian Mission in 1857, and with the exception of Assam, and the N. Frontier Provinces is now established in all the political Divisions of India. Its number of baptized Christians stands at 266,273, under the supervision of 90 ordained and 900 unordained Ministers. Students, Sunday School scholars stand at 39,657, and its graduates number 1,569 with 39,657 Medical work. The Secretary for the Bombay Conference is Mrs A. Abbott, The Marwari are engaged in Educational, Zenana, and the Mission Operates with the main work of the Mission Upwards of 172 Lady Missions. The Women's Foreign Missionary Society of the M.C. B. Mission is divided into 7 Conferences and is co-extensive with the main work of the Mission.

Cooling, B.A., Madras

The Free Methodist Mission of America—Established at Yeomai, 1898, operates in Beitar with a Staff of 19 Missions and 16 Indian workers Organised church 1, Communitarians 70, 1 Industrial and 6 Elementary schools, with 155 pupils

S. C. J. S. D. Collins, Yeomai, Beitar.

ROYAL ARMY TEMPERANCE ASSOCIATION.

The wonderful change that in late years has taken place in the character of the British Army, in India especially, is due to various causes, including the increased interest in games and sports, the spread of education, the different class of men enlisted, and so on, but the R. A. T. A. has always been given its due share among other causes, by all authorities and Blue Books, and particularly by Officers Commanding Divisions, Brigades and Units. These changes in conduct are seen most plainly in the increased good health of the Army in India.

Effect in the Army.—In the year 1889, 1,174 British soldiers died in India, and 1,800 were invalided until for further duty. In 1890, only 330 died, and 484 were invalided. In 1889, 688 underwent treatment for Delirium tremens, in 1890, only 37. In conduct the same difference is to be found, as late as 1901 as many as 545 Courts Martial were held on men for offences due to excessive drinking, in 1906 only 217. In 1904, 2,231 there were 4,681. In regard to the character of the men themselves, who become members of the Association, during their service, we find that in 1912, 59 per cent on transfer from the Colours obtained Exemplary character, and 93 per cent either Exemplary or Very Good, the remainder were for the most part men who, after some years of heavy drinking, had towards the end of their service been persuaded to try and reform themselves, but not soon enough to avoid the consequences of previous excess.

Organisation.—The War has necessarily brought increased work upon this society, the results of which were very quickly apparent. Capacious reception sheds fitted up in the Docks at Bombay and Karachi, proved of the greatest value to troops moving from India, and to the large number coming in special arrangements aided by a loan from the Government of India, enabled the R. A. T. A. to organise branches in every Territorial unit immediately on arrival, special attention being paid to small detachments and to the Hill stations. In consequence there were, within a month of the completion of the Garrison, over 70 Territorial Branches, containing nearly 50 per cent of the new recruits. In addition to covering all troops from Aden to Singapore, the R. A. T. A. is the only Society working among the Troops of I. E. I. "D", the force in the Persian Gulf. Institutes have been opened and the cordial good will of the authorities enables the R. A. T. A. to provide many amenities to the very trying exiles sent back to India for periodic rest, in addition, the force in the organisation of the Council and management —

Patron His Majesty the King Emperor
President His Excellency the Commander-in-Chief

In 1862 there was started among the British troops in Agra a small Society, under the leadership of Rev G. Gresson, Baptist minister, which after a short time took the name of the soldiers' Total Abstinence Society.

For some ten years the Society struggled with varying success, spreading to other Garrison Stations, but at the end of that time, though it had obtained recognition from the Horse Guards, and was the first Society whose Pledge was so recognised, the membership was not more than 1,200. In the year 1873, however, through the influence of the then Commander-in-Chief, the work was placed on a firmer footing, the Rev Gelson Gresson gave up his whole time to it, and by accompanying the troops through the Afghan War, making an extended tour through Egypt, and bringing the work into close touch with troops, both during peace and war, in the year 1880, when he left the Society, it numbered about 11,000 members. He was followed by a Madras Chaplain, who after two years gave place to the Rev J. H. Bateson. In 1880, the late Lord Roberts, Commander-in-Chief, organised his scheme for Regimental Institutes, which have had a wonderful effect on the life of British soldiers in the East, and the Total Abstinence Society was so far incorporated into the scheme as to be allowed ample accommodation, and many practical benefits, in every Unit. At the same time the name was changed to that of the Army Temperance Association, and the work of various societies thus linked together, under one organisation. The effect has been more than even the inaugurator himself ever hoped for. The membership rose steadily from that date and still increases.

Growth of the Society.—In 1880 there were 12,140 members in 1899, 20,688, in 1909, 30,220, while in 1913-14, the total was 35,000, or over 45 per cent of the total Garrison in India. In 1908, the Secretary having retired after 20 years' work, the Rev H. C. Martin, M.A., a Chaplain in Bengal, was selected by H. E. Lord Kitchener, to the post of Secretary. Twenty years ago, the Association, which has now for some years been the Royal Army Temperance Association, with the Patronage of King Edward VII, and later of the King Emperor, George V, organised a similar Society in Great Britain, with headquarters in London, from which the troops in South Africa, the Mediterranean, etc., are controlled, so that the whole British Army receives the attention of the Association.

Varied Activities.—What primarily has been the effort of the Association, namely, the decrease of Intemperance, and promotion of sobriety among soldiers has gradually grown into work of every kind, in the interests of soldiers, promotion of sports, occupation of spare time, assistance towards employment in Civil Life, advice and information on the subject of Insurance, provision of Bursarships, all tending to enlist the support of officers and men in the Association, and add to its value to them, and to the efficiency of

Warrant of Precedence in India. ' °

(Brought up to 1 January, 1915)

VICTORIA, by the Grace of God of the United Kingdom of Great Britain and Ireland Queen, Defender of the Faith, Empress of India,—

To all to whom these presents shall come

WHEREAS it hath been represented unto Us that it is advisable that the rank and precedence of persons holding appointments in the East Indies as regulated by Our Royal Warrant, dated the 18th day of October, 1876, should be altered. We do therefore hereby declare that it is Our will and pleasure that in lieu of the table below recited We said recited Warrant, the following table be henceforth observed with respect to the rank and precedence of the persons hereinafter named, viz —

- 1 Governor-General and Viceroy of India
- 2 Governors of Madras, Bombay and Bengal
- 3 President of the Council of the Governor-General
- 4 Lieutenant-Governor when in his own territories
- 5 Commander-in-Chief in India
- 6 Lieutenant-Governor
- 7 Chief Justice of Bengal
- 8 Bishop of Calcutta, Metropolitan of India
- 9 Ordinary Members of the Council of the Governor-General
- 10 Commander-in-Chief of Her Majesty's Naval Forces in the East Indies
- 11 Chief Justice of a High Court other than that of Bengal
- 12 Bishops of Madras and Bombay
- 13 Ordinary Members of Council in Madras, Bombay and Bengal
- 14 General Officers Commanding the Northern and Southern Armies, Chief of the General Staff
- 15 Chief Commissioners of the Central Provinces and Assam, Residents at Hyderabad and Agents to the Governor-General in Rajputana, Central India, and Baluchistan, Executive Members of the Council of the Lieutenant-Governor of Bihar and Orissa, the Agent to the Governor-General and Chief Commissioner of the North-West Frontier Province [NOTE—When within their own jurisdiction these officers take precedence of those mentioned in Article 14]
- 16 Justice Judges of a High Court
- 17 Chief Judge of a Chief Court
- 18 Military Officers above the rank of Major-General
- 19 Comptroller and Auditor-General
- 20 Additional Members of the Council of the Governor General for making Laws and Regulations, Chairman of the Railway Board
- 21 Bishops of Lahore, Rangoon, Nagpur and Lucknow
- 22 Secretaries to the Government of India, Joint Secretaries to the Government of India in the Public Works Department, and Members of the Railway Board
- 23 Commissioner in Sind
- 24 Judges of a Chief Court, Recorder of Rangoon and Judicial Commissioners, Burma
- 25 Chief Secretaries to the Governments of Madras and Bombay, Chief Commissioners of Delhi

- 26 Major-Generals, Members of a Board of Revenue, Commissioners of Revenue and Customs, Bombay, Financial Commissioners, Punjab and Burma, the Inspector-General of Irrigation, and the Director-General, Indian Medical Service
- 27 Judicial Commissioners, including Additional Provincial Commissioners and Sind Central Provinces and Sind
- 28 Additional Members of the Councils of the Governors of Madras, Bombay and Bengal for making Laws and Regulations, Members of the Legislative Council of a Lieutenant-Governor
- 29 Vice Chancellors of Indian Universities
- 30 Members of the Indian Civil Service of 30 years' standing
- 31 Advocates-General, Calcutta
- 32 Commissioners of Divisions, the Superintendent of Port Blair, and Residents, Political Agents, and Superintendents drawing Rs 2,000 a month and upwards (not being Collectors or Deputy Commissioners of British Districts), with their respective charges, the Revenue and Judicial Commissioners in Baluchistan, with Baluchistan and the Agency Territories
- 33 Chief Secretaries to Local Governments other than those of Madras and Bombay
- 34 Surveyor-General of India, Directors-General of the Post Office, of Telegraphs in India and of Railways, Chief Engineers, first class, and the Directors of Railway Construction and Railway Traffic, Accountants-General, Military and Public Works Departments, Director, Royal Indian Marine, and Manager, North-Western Railway
- 35 Bishops (not territorial) under license from the Crown
- 36 Archdeacons of Calcutta, Madras and Bombay
- 37 Brigadiers-General, Consuls-General
- 38 Commissioners of Divisions, the Revenue and Judicial Commissioners in Baluchistan when in Kalat or Las Bela or elsewhere without the limits of his charge
- 39 Commissioner of Northern India Salt Revenue, Opium Agents, Benares and Bihar, and Director, Central Criminal Intelligence Department
- 40 Secretaries and Joint Secretaries to Local Governments, and Private Secretaries to the Viceroy
- 41 Members of the Indian Civil Service of 23 years' standing and Colonels, Consuls
- 42 Military Secretary to the Viceroy
- 43 Judicial Commissioners of the Hyderabad Assigned Districts and Baluchistan, the Superintendent of Port Blair, Residents, Political Agents, and Superintendents drawing Rs 2,000 a month and upwards (not being Collectors or Deputy Commissioners of British Districts)
- 44 Inspector-General of Forests in India, Director of the Geological Survey, and Director-General of Education in India, Sanitary Commissioner with the Government of India

All officers not mentioned in the above table, whose rank is regulated by comparison with rank in the army, to have the same rank with reference to civil servants as is enjoyed by Military Officers of equal grades.

All other persons who may not be mentioned in this table, to take rank according to general usage, which is to be explained and determined by the Governor-General in Council in case any question shall arise.

Nothing in the foregoing Rules to disturb the existing practice relating to precedence at Native Courts, or on occasions of intercourse with Natives, and the Governor-General in Council to be empowered to make rules for such occasions in case any dispute shall arise.

Supplementary Graded List of Civil Offices not Reserved for Members of the Indian Civil Service Prepared Under the orders of the Governor-General in Council

All ladies to take place according to the rank herein assigned to their respective husbands, with the exception of wives of Peers, and of ladies having precedence in England independent of their husbands, and who are not in rank below the daughters of Barons, such ladies to take place according to their several ranks, immediately after the wives of Members of the Council of the Governor-General.

Given at Our Court at Windsor this tenth day of December, in the year of Our Lord One thousand eight hundred and ninety-eight, and in the sixty-second year of Our Reign

By Her Majesty's Command,
(Signed) GEORGE HAMILTON,

<p>Divisional and District and Sessions Judges Examiners of Accounts, Public Works Department, 2nd and 3rd Classes Government Astronomer, Madras Government Emigration Agents at Calcutta, for British Guiana and Natal, and for Trinidad, Fiji, Jamaica, and Mauritius Imperial Bacteriologist Inspector of Mines to the Government of India Librarian, Imperial Library Officers in charge of the Records of the Government of India Officers of the Indian Educational Service, and of the graded Educational Service drawing Rs 1,250 a month and upwards Officers of the Superior Revenue Establishment of State Railways, 1st Class, 2nd and 3rd Grades Principal of the Mayo College at Ajmere Principal of the Rajahmundry College at Rajahmundry Inspector on Economic Products Superintendent of the Royal Botanical Gardens, Calcutta Superintendents, Geological Survey of India Superintendents of Revenue Survey and Assessment, Bombay Superintendents of the Survey of India Department, 2nd Grade Superintending Engineers, Public Works Department, 2nd and 3rd Classes Under Secretaries to the Government of India *THIRD CLASS—(No 78 of the Warrant) Agricultural Chemist Assistant Directors of Dairy Farms Assistant Inspectors-General of Forests Assistant Secretaries to the Government of India Chief Chemical Examiner, Central Chemical Laboratory, Natal Collector of Stamp Revenue, Superintendent of Excise Revenue and Deputy Collector of Land Revenue, Calcutta Commander of the steamer employed in the Persian Gulf Section of the Indo-European Telegraph Department Constructors of the Royal Indian Marine Classes</p>	<p>*FIRST CLASS—(No 55 of the Warrant) Assay Master of the Mint, Calcutta and Bombay Chief Judges of Presidency Courts of Small Causes Commissioners of Police, Calcutta, Madras, Bombay, and Raigoon Controller of Printing and Stationery Deputy Comptroller-General Director-General of Archaeology Director-General of Statistics Director of the Botanical Survey of India Inspector-General of Agriculture in India Masters of the Mint, Calcutta and Bombay Meteorological Reporter to the Government of India Superintendent of Revenue Survey, Madras *SECOND CLASS—(No 73 of the Warrant) Adviser on Chinese Affairs in Burma Agent General in India for the British Protectorates in Africa under the Administration of the Foreign Office Chief Collector of Customs, Burma Chief Constructor of the Royal Indian Marine Dockyard at Bombay Chief Inspector of Mines in India Chief Presidency Magistrates Chief Superintendents of the Telegraph Department Collector of Customs and Salt Revenue, Sind Collectors and Magistrates of Districts, and Deputy Commissioners of Districts and Settlements Conservators of Forests, 2nd and 3rd Grades Deputy Accountants General under Local Governments Deputy Directors of Telegraphs Deputy Inspectors-General of Police Deputy Superintendent of Port Har Directors of the Persian Gulf Section, and at the Persian Section of the Indo-European Telegraph Department Director of Telegraphs, 2nd, 3rd and 4th Classes</p>
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Mewar (Udaipur) The Maharaja of.

Salutes of 17 guns

Bahawalpur The Nawab of

Bharatpur The Maharaja of

Bikaner The Maharaja of

Bundi The Maharaja of

Cochin The Maharaja of

Cutch The Rao of

Jampur The Maharaja of

Karauli The Maharaja of

Kotah The Maharaja of

Marwar (Jodhpur) The Maharaja of

Patiala The Maharaja of

Rewa The Maharaja of

Tonk The Nawab of.

Salutes of 15 guns

Alwar The Maharaja of

Banswar The Maharaja of

Bhutan The Maharaja of.

Datta The Maharaja of

Dewas (Senior Branch) The Raja of

Dewas (Junior Branch) The Raja of

Dhar The Raja of

Dholpur The Maharaja of

Dungarpur The Maharaja of

Idar The Maharaja of

Jaisalmer The Maharaja of

Kabarpur The Mir of

Kishangarh The Maharaja of

Orchha The Maharaja of

Patabagarh The Maharaja of.

Sikim The Maharaja of

Sirohi The Maharaja of

Salutes of 13 guns

Benares The Raja of

Cooch Behar The Maharaja of

Jaura The Nawab of.

Kanpur The Nawab of

Tippura The Raja of

Salutes of 11 guns

Ajgarh The Maharaja of

Baoni The Nawab of

Bhavnagar The Thakur Sahib of

Cambar The Nawab of

Chambai The Raja of

Chhatarpur The Maharaja of

Dhanganad The Raja of

Farrukhot The Raja of

Gondal The Thakur Sahib of

Jambhna The Raja of

Jhalawar The Raj-Rana of

Jind The Maharaja of

Junagadh (or Junagar) The Raja of

Kabli (Bilaspur) The Raja of

Kapurtihla The Maharaja of

Landi The Raja of

Munpur The Raja of

Morvi The Thakur Sahib of

Nabha The Maharaja of

Narsingharh The Raja of

Nawanagar (or Nawanagar) The Raja of

Palanpur The Dewan of

Rana The Maharaja of

Porbandar The Raja of

Puducherry (or Pondicherry) The Raja of

Randhapur The Nawab of

The Raja of

Rajgarh The Raja of

Rajpipla The Raja of

Ratan The Raja of

Sailana The Raja of

Samthar The Raja of

Sirmur (Nahan) The Raja of

Sitaman The Raja of

Subet The Raja of

Tehr (Garhwal) The Raja of

Salutes of 9 guns

Alh Rajpur The Raja of

Balasinor (or Vadashnor) The Maharaja (Babi) of

Bansda The Raja of

Barambha The Raja of

Barwadi The Raja of

Chhotu Udepur (or Mahun) The Raja of

Dharmpur The Raja of

Dhol The Thakur Sahib of

Radhahi (Shubhr) The Sultan of

Haspur (or Thabar) The Nawab of

Karond (Kalahandi) The Raja of

Kengtung (or Kyauington) The Nawab of

Kishan and Socotra The Sultan of

Lambey (or Al Haura) The Sultan of

Lamir The Thakur Sahib of

Lunawara (or Lunawada) The Raja of

Mahar The Raja of

Maler Kotla The Nawab of

Mong Nai The Nawab of

Nagod The Raja of.

Palitana The Thakur Sahib of

Rajkot The Thakur Sahib of

Sachin The Nawab of

Savarnadi The Sar Desai of

Shehr and Mohalla The Sultan of

Smith The Raja of

Vankaner (or Vankaner) The Raj Sahib of

Vadawan (or Vadwan) The Thakur Sahib of

Yamghwe (or Nyamgywe) The Nawab of

Personal Salutes.

Salutes of 21 guns

Gwalior Honorary Major-General His High-

ness Maharaja Sir Madho Rao Sindha Baha-

dur, GCSI, GVO, A.D.C., L.D., Maha-

rajya of.

Jampur Honorary Major-General His High-

ness Maharajadhiraja Sir Sawal Madho

Singh Bahadur, GCSI, GORE, GVO,

L.D., Maharaja of

Kolhapur His Highness Sir Shahu Chhatra-

pati Maharaja, GCSI, GORE, GVO,

L.D., Maharaja of

Mewar (Udaipur) His Highness Maharaja-

adhiraja Sir Fateh Singh Bahadur,

GCSI, GORE, Maharaja of

Travancore His Highness Sri Viharaja Raja

Sir Bala Varma Bahadur, GCSI,

G.C.F., Maharaja of

Salutes of 19 guns

Cochin His Highness Raja Sree Sir Rama

Varma, GCSI, G.C.F., Raja of

Mysore Her Highness Maharani Kempa

Nagammani Avaru Maharaja, G.C.F.,

Lucy Maharaja Sir Chandra Shumshere

Tung Bahadur Rana, G.C.B, GCSI, GVO,

P.C., Prime Minister, Maharaja of

Nepal Honorary Major-General His Excel-

Standards of Chief Officers

Indore The Maharaja (Holkar) of
Jannam and Kashi The Maharaja of

1. *What is the purpose of the study?*
 2. *What are the research questions or hypotheses?*
 3. *What is the study design?*
 4. *What are the variables?*
 5. *What are the data collection methods?*
 6. *What are the results?*
 7. *What are the conclusions?*
 8. *What are the limitations?*
 9. *What are the implications?*
 10. *What are the future research directions?*

The Shih of Bahrain
The Shih of Abu Dhabi

Salutes of 1 June

The month of DECEMBER

The Sheikh of Ajman
The Sheikh of Umm al-Qawain

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Local Personal Salaries

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Local Personal Salaries

Sainte of 13 guns
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Salutes of 12 guns

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Suite of 11 guns

TABLE 1. JOINT PROBABILITY

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Salute of 3 quins

STALVARIIES OF CHIEF OFFICERS.

It is to be noted that the labels of shares mentioned for the Chief Officers of the Administration of India are liable to variation, and it should be noted that the pay of members of the Indian Civil Service is subject to a deduction of 1 per cent for subscription towards a fund.

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24,000

18,000

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Secretary to Commanders in Chief in India
31,000
80,000

Preident, Kallway Board
 60,000 or 72,000
 48,000

Secretary to the Government of India in the Army and Public Works and Legisla-

the Departments
Secretaries to the Government of India in the Finance, Foreign, Home, Revenue and

43,000
36,000

Secretary to the Government of India in the Education Department

Comptroller and Auditor General
Controller of Customs

2 Accountants General, (12-5) 33,000 30,000

1	Central bank of North India Ltd. Patna	27,000
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1 Commissioner of Southern Industrial Revenue
1 Director General of Posts and Telegraphs

Postmasters General	27,000 to 30,000	21,000 to 24,000
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24,000

27,000

Deputy Secretaries to the Government of India in the Legislative and Home Departments

Superintendent of Port Blair 30,000 to 36,000

Salaries of Chief Officers

Payee	Annual Rs
1 Chief Commissioner of Delhi	36,000
1 Director, Criminal Intelligence	36,000
1 Deputy Director, Criminal Intelligence	18,000 to 24,000
Inspector-General of Forests	31,800
Surveyor-General, Survey of India	36,000
1 Chief Inspector of Mines in India	22,200
1 Director-General, Indian Medical Service	36,000
1 Sanitary Commissioner with the Government of India	24,000 to 30,000
1 Director-General of Archaeology in India	20,400
1 Administrator-General of Bengal	24,000
1 Director-General of Commercial Intelligence	24,000
1 Indian Observatories	24,000
Controller of Stationery and Printing	18,000 to 24,000
Governors of Madras, Bombay, and Bengal	120,000
Governors of Madras, Bombay, and Bengal	18,000
Private Secretaries to Governors of Madras, Bombay, and Bengal	12,000
Military Secretary and Aide-de-Camp to Governors of Madras, Bombay, and Bengal	19,976
Bishop of Calcutta	25,600
Bishop of Madras	25,600
Bishop of Bombay	25,600
Chief Justice of Bengal	72,000
Chief Justices of Madras, Bombay, and the North-Western Provinces	60,000
Puisne Judges of the High Courts of Calcutta (15), Madras (6), Bombay (6), and the North-Western Provinces (6)	48,000
Chief Judge of the Chief Court, Punjab	48,000
Burma	48,000
Judges of the Chief Court, Punjab (+), and Burma (+), except Chief Judges	42,000
6 Political Residents, 1st class	48,000
2nd class	33,000
Political Officers on time scale	5,400 to 28,800
Provincial Salaries.	
N B—Acting and other allowances are not included in the salaries shown	
Bengal	
4 Members of Council	64,000
5 Commissioners of Divisions	45,000
1 Chief Secretary to Government	35,000
3 Secretaries to Government	40,000
3 Under Secretaries to Government	38,000
1 Exercise Commissioner	12,000
1 Deputy ditto	21,000
1 Chairman of Corporation of Calcutta	42,000
1 Collector of Customs, Calcutta	30,000
12 Magistrates and Collectors, 1st grade	27,000
2nd	21,600
3rd	18,000
17 Joint Magistrates and Deputy Collectors, 1st grade	10,800
2nd	8,400
1 Assistant Magistrates and Collectors, 1st grade	36,000
2nd	30,000
3rd	24,000
1 Chief Judge, Presidency Courts of Small Causes	27,600
1 Judges	13,500
1 Advocate General	48,000
1 Solicitor to Government	60,000
1 Registrar, High Court	20,400
1 Inspector General of Police	30,000 to 36,000
1 Director of Public Instruction	30,000 to 36,000
1 Private Secretary to H E The Governor	21,600
1 Director of Land Revenue	18,000
1 Secretary of the Board of Revenue	15,000
Bihar and Orissa	
1 Lieutenant Governor	1,00,000
2 Members of the Executive Council	60,000
3 Members of the Board of Revenue	42,000

Salaries of Chief Officers

Punjab— <i>cl</i>		Pay per Annum
2 Under Secretaries to Government	12,000	
1 Under Secretary, Police Department, and Inspector-General of Police	30,000	
1 Under Secretary, Educational Department	24,000	
2 Financial Commissioners	42,000	
2 Secretaries to Financial Commissioner	10,800 and 8,400	
5 Commissioners	33,000	
14 Deputy Commissioners, 1st grade	27,000	
14 " " 2nd " "	21,600	
14 Assistant Commissioners, 1st grade	18,000	
14 " " 3rd " "	10,800	
14 " " 2nd " "	8,400	
39 " " 1st grade	4,800 to 6,000	
2 Divisional Judges, 1st grade	33,000	
4 " " 2nd " "	30,000	
10 " " 4th " "	27,000	
10 " " 3rd " "	21,600	
10 District Judges	18,000	
1 Sub Judge and Judge, Small Cause Court, Simla	15,000	
1 Registrar of the Chief Court	16,000	
1 Legal Remembrancer	24,000	
1 Inspector-General of Police	24,000	
1 Director of Public Instruction	24,000	
Burma		
1 Lieutenant Governor	1,00,000	
1 Chief Secretary to Government	36,000	
2 Secretaries	21,600	
2 Under Secretaries	9,000	
1 Assistant Secretary	6,000	
1 Financial Commissioner	42,000	
1 Settlement Commissioner and Director of Land Records	33,000	
1 Deputy Director of Land Records	19,200	
1 Secretary to Financial Commissioner	12,000	
1 Director of Agriculture	18,000	
8 Commissioners of Divisions	33,000	
12 Deputy Commissioners, 1st grade	27,000	
13 " " 2nd " "	21,600	
15 Assistant " "	18,000	
12 " " 1st " "	12,000	
13 " " 2nd " "	8,400	
52 " " 3rd " "	7,200	
1 Judicial Commissioner	5,400 to 6,000	
2 Divisional Judges, 1st grade	42,000	
1 " " 2nd " "	33,000	
1 " " 3rd " "	30,000	
2 " " 4th " "	27,000	
8 District " "	21,600	
1 Registrar, Chief Court, Lower Burma	18,000	
1 Government Advocate	14,400	
Central Provinces		
1 Chief Commissioner	62,000	
1 Financial Commissioner	42,000	
5 Commissioners of Divisions	33,000	
10 Deputy Commissioners, 1st class	27,000	
11 " " 2nd " "	21,600	
13 " " 1st " "	18,000	
10 Assistant " "	10,800	
10 " " 2nd " "	8,400	
1 Judicial Commissioner	4,800 to 6,000	
1 Additional Judicial Commissioners	42,000	
2 Additional Judicial Commissioners	33,000	
4 Divisional and Sessions Judges	36,000 and 20,400	
2 District and Sessions Judges	14,800 to 18,240	
1 Inspector-General of Police	27,000 to 33,000	
1 Director of Public Instruction	18,000 to 24,000	
Berar		
1 Commissioner	33,000	
2 District and Sessions Judges	22,000 and 20,500	

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15. *Chlorophyll* *a* and *b* contents were determined by the method of Arar and Johnson (1977).

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From the above it is seen that the

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אברהם בן יצחק בן יצחק
בית המדרש הגדול - ירושלים

12345678910111213141516171819202122232425262728293031323334353637383940414243444546474849505152535455565758596061626364656667686970717273747576777879808182838485868788899091929394959697989910010110210310410510610710810911011111211311411511611711811912012112212312412512612712812913013113213313413513613713813914014114214314414514614714814915015115215315415515615715815916016116216316416516616716816917017117217317417517617717817918018118218318418518618718818919019119219319419519619719819920020120220320420520620720820921021121221321421521621721821922022122222322422522622722822923023123223323423523623723823924024124224324424524624724824925025125225325425525625725825926026126226326426526626726826927027127227327427527627727827928028128228328428528628728828929029129229329429529629729829930030130230330430530630730830931031131231331431531631731831932032132232332432532632732832933033133233333433533633733833934034134234334434534634734834935035135235335435535635735835936036136236336436536636736836937037137237337437537637737837938038138238338438538638738838939039139239339439539639739839940040140240340440540640740840941041141241341441541641741841942042142242342442542642742842943043143243343443543643743843944044144244344444544644744844945045145245345445545645745845946046146246346446546646746846947047147247347447547647747847948048148248348448548648748848949049149249349449549649749849950050150250350450550650750850951051151251351451551651751851952052152252352452552652752852953053153253353453553653753853954054154254354454554654754854955055155255355455555655755855956056156256356456556656756856957057157257357457557657757857958058158258358458558658758858959059159259359459559659759859960060160260360460560660760860961061161261361461561661761861962062162262362462562662762862963063163263363463563663763863964064164264364464564664764864965065165265365465565665765865966066166266366466566666766866967067167267367467567667767867968068168268368468568668768868969069169269369469569669769869970070170270370470570670770870971071171271371471571671771871972072172272372472572672772872973073173273373473573673773873974074174274374474574674774874975075175275375475575675775875976076176276376476576676776876977077177277377477577677777877978078178278378478578678778878979079179279379479579679779879980080180280380480580680780880981081181281381481581681781881982082182282382482582682782882983083183283383483583683783883984084184284384484584684784884985085185285385485585685785885986086186286386486586686786886987087187287387487587687787887988088188288388488588688788888989089189289389489589689789889990090190290390490590690790890991091191291391491591691791891992092192292392492592692792892993093193293393493593693793893994094194294394494594694794894995095195295395495595695795895996096196296396496596696796896997097197297397497597697797897998098198298398498598698798898999099199299399499599699799899910001001100210031004100510061007100810091010101110121013101410151016101710181019102010211022102310241025102610271028102910301031103210331034103510361037103810391040104110421043104410451046104710481049105010511052105310541055105610571058105910601061106210631064106510661067106810691070107110721073107410751076107710781079108010811082108310841085108610871088108910901091109210931094109510961097109810991100110111021103110411051106110711081109111011111112111311141115111611171118111911201121112211231124112511261127112811291130113111321133113411351136113711381139114011411142114311441145114611471148114911501151115211531154115511561157115811591160116111621163116411651166116711681169117011711172117311741175117611771178117911801181118211831184118511861187118811891190119111921193119411951196119711981199120012011202120312041205120612071208120912101211121212131214121512161217121812191220122112221223122412251226122712281229123012311232123312341235123612371238123912401241124212431244124512461247124812491250125112521253125412551256125712581259126012611262126312641265126612671268126912701271127212731274127512761277127812791280128112821283128412851286128712881289129012911292129312941295129612971298129913

וְהַיּוֹדֵעַ שֶׁכָּל הַמַּשְׂרָף מִן הַבְּתוּלָה הַזֶּה יִפְסָד וְיִשְׁתַּחֲצֹק בְּאֵין עֲשֵׂה לְפָנָיו

Director of Public Instruction

Indian Orders The Star of India.

Extra Knights Grand Commanders (G C S I)

H M the Queen
H R H The Duke of Connaught
Knights Grand Commanders (G C S I)

H H the Maharaja of Baroda
H H the Maharana of Udaipur
H H the Maharaja of Jaipur
H H the Maharaja of Travancore
The Marquis of Lansdowne
Baron Reay
The Earl of Elgin
H H the Maharaja of Kohlapur
H H the Maharaja of Gwalior
Lord Harris
H H the Maharaja of Rewa
Baron Macdonnell
H H the Maharaja of Idar
Earl Curzon of Kedleston
Baron Sandhurst
Lord George Hamilton
H H the Raja of Cochin
Maharaja Sir Chandra Shamsere Jung of Nepal
H H the Maharaja of Orissa
H H the Maharaja of Mysore
Field-Marshal Viscount Kitchener
H H the Begum of Bhopal
Sir Stewart Bayley
Sir Dennis Fitz-Patrick
Sir Digby Probyn
Baron Sydenham
Sir Arthur Lawley
Sir John Hewitt
H H the Maharaja of Bikaner
H H Maha Rao of Kotah
General Sir O'Moore Creagh
H H the Raja of Kapurthala
H H the Nizam of Hyderabad
H H the Aga Khan
H H the Nayar of Tonk

Knights Commanders (K C S I)

The Earl of Cromer
Sir Joseph West Ridgeway
Sir Theodore Graceful Hope
Sir William Chichele Ploverden
Sir James Broadwood Lyall
Sir Charles Haikes Rod Crosswaite
Sir David Miller Barbour
Sir Andrew Richard Scoble
Sir Phillip Percival Hutchins
Sir Henry Edward Stokes
Sir Henry Mortimer Durand
Sir Frederick William Richards Newmarch
Major-General Sir Oliver Richardson
H H Maharaja of Sirohi
Sir Courtney Percival Herbert
Lieut-Col Sir George Scott Robertson
Sir William Lushine Ward
Brig-Surg-Lieut-Col Sir Alfred Gurney Leithbridge
H H Maharaja of Bundi
Sir Edward Charles Buch
Sir William Macborth Young
Sir Charles Lyall
Sir Robert Joseph Crosswaite
Sir William John Cunningham
The All-India Council of Chiefs
Prince Louis d'Arenberg

The Order of the Star of India was instituted by Queen Victoria in 1861, and enlarged in 1866, 1876, 1897, 1902, and 1911, and the dignity of Knight Grand Commander may be conferred on Princes or Chiefs of India, or upon British subjects for important and loyal services rendered to the Indian Empire, the second and third classes of services in the Indian Empire of not less than thirty years in the department of the Secretary of State for India. It consists of the Sovereign, Grand Master (the Viceroy of India), the first class of forty-four Knights Grand Commanders (22 British and 22 Indian), the second class of one hundred Knights Commanders, and the third class of two hundred Companions, exclusive of Extra and Honorary Members, as well as certain additional Knights and Companions.

The Insigula are (i) the Collar of gold, composed of the lotus of India, of palm branches tied together in festure, of the united red and white rose, and in the centre an Imperial Crown, all enamelled in their proper colours and linked together by gold chains (ii) The Star of a Knight Grand Commander is composed of rays of gold issuing from a centre, having thereon a star of five points in diamonds resting upon a light blue enamelled circular ribbon, tied at the ends and inscribed with the motto of the Order, *Queen Victoria's Royal Emmyg thereon*, set in a perforated and ornamental oval, containing the motto of the Order surmounted by a star of five points, all in diamonds (iv) The mantle of light blue satin lined with white, and fastened with a cordon of white silk with blue and silver tassels. On the left side a representation of the Star of the Order.

The ribbon of the Order (four inches wide for Knights Grand Commanders) is sky-blue, having a narrow white stripe towards either edge, and is worn from the right shoulder to the left side. A Knight Commander wears (a) around his neck a ribbon two inches in width, of the same colours and pattern as a Knight Grand Commander, and pendant therefrom a badge of a smaller size, (b) on his left breast a star composed of rays of silver issuing from a gold centre, having thereon a silver star of five points resting upon a light blue enamelled circular ribbon, tied at the ends, inscribed with the motto of the Order in diamonds. A Companion wears from his left breast a badge of the same form as appointed for a Knight Commander, but of a smaller size pendant to a like ribbon of the breadth of one and a half inches. All Insigula are returnable at death to the Central Chancery, or if the recipient was resident in India, to the Secretary of the Order at Calcutta.

Sovereign of the Order—H M the King
Grand Master of the Order—The Viceroy of India
For the time being, Baron Hardinge of Pembrokeshire
Honorary Knights Grand Commanders
(G C S I)
The All-India Council of Chiefs
Prince Louis d'Arenberg

George Moss Harriot
Ernest Herbert Cooper W.ish

Edward Vere Levinge
Robert Nathan
Arthur Meredith
Lieut.-Col Charles Archer

James Peter Orr
Herbert Alexander Casson
William Axel Hertz
Mahadev Bhaskar Chaudal

George Seymour Curtis
William Henry Clark
Lieut.-Colonel Francis Aylmer Maxwell

Herbert Thompson
Rao Bahadur Nanak Chand
Surgeon General William Burney Bannerman

Lieut.-Col John Ramsay
Stuart Lockwood Maddox
Gilbert Thomas Walker

Lieut.-Col Philip Richard Thornagh Gordon
Rohan Zulikar Ali Khan of Maler Kotla
Col George Francis Angelo Harris

Edmund Vivian Gabriel
John Stuart Donald
Henry Montague Segundo Mathews

Arthur Cromwellin Hanlin
Faridoonji Jamsheji
Maavi Ahmad Hussain

Horne Charles Jules
H H Raja Bije Chand, Chief of Kahlur
Lieut.-Col Arthur Russell Aldridge

Lieut.-Col Mathew Richard Henry Wilson
John Charles Burnham
Col Thomas Francis Bruce Kenny-Talvour

Michael Kennedy
Thakor Karansinghji Vajiraji
Meherban Mudoohji Rao Juvrao Naik Nana Nimb

Lieut.-Col Alain Chartier de Lotbiniere Joly de
Lotbiniere
Brig.-Gen Herbert Vaughan Cox

Brev.-Col Robert Smeton MacLagan
Lieut.-Col Charles Mowbray Dallas
Edward Henry Scamander Clarke

Jagdish Chandra Bose
Abbas Ali Baig
Oswald Campbell Lees

Lt.-Col G G Giffard
F W Johnston
William Henry Lucas

A I Saunders
Vahkatesinghji Kestarsinghji
Paul Gregory Mektus

Lieut.-Col Albert Edward Woods
William Esall Tempest Bennett
Hon Maj Sahibzada Obaidullah Khan

William Ogilvie Horne
Pazhamaeri Sundaram Aiyar Sivaswami Aiyar
William Harrison Moreland, C I E

Divan Bahadur Chaudh Raghunath Das, of
Kotah
Col Lescock Hamilton Reid

Surg.-Gen Henry Wichham Stevenson
Hon Lieut.-Col Raja of Lambagranon
Lionel Davidson

George Carmichael
Lieut.-Col Donald John Campbell MacXabb
Lieut.-Col Henry Walter George Cole

Stuart Mifford Fraser
Henry Venn Cobb
Behari Lal Gupta
Henry Wheeler

Lieut.-Col. Sir Hugh Daly
Raja of Burdwan
Razab of Pahnas

Sardar Badan Singh of Malaulah
Sir Thomas Gordon Walker
Col James White Thurburn

Alfred Breerton
William Thomas Hall
Richard Townsend Greer

Col. Robert Henry Jennings
Sir Louis William Dane
Sir Alfred Macdonald Buttel Irwin

Lt.-Col James Bird Hutchinson
Raja Ram Pal of Kotlehr
Hermann Michael Kisch

Sir Cecil Michael Wilford Brett
Herbert Bradley
Sir Frank Campbell Gates

John Mitchell Holms
Percy Seymour Vessey Fitzgerald
Lt.-Col Willoughby Pittcairn Kennedy

Raja Narendra Chand
Arthur Devalar Youngshband
Oscar Theodore Barrow

Col. Howard Goad
Francis Alexander Snake
Said Husain Bilgrami

Percy Comyn Lyon
Algernon Robert Sutherland
Sir George Watson Shaw

William Arbuthnot Inglis
Romer Edward Youngshband
Col Herbert Mullyay

John Alexander Brown
John Henry Fennis
Maj.-Gen Sir Alfred William Lambart Dayle

Mautee Walter Fox-Strangways
William Lochiel Saple Lovett Cameron
Raja Jladho Lal

John Stratheden Campbell
Lieut.-Col. Charles Herbert
Sir Ashtosh Mukharji

Maj.-Gen Sir Henry
Hawkes
Dr Kash Behari Ghosh

Francis Capel Harrison
Lieut.-Col Sir Percy Zachariah Cox
Comd'r Sir Hamilton Eym Freer-Smith

Andrew Lamond Castle Stuart
Brig.-Gen William Riddell Birdwood
Norman Goodford Cholmeley

Walter Francis Rice
Alexander Gordon Cardew
Sir Frederick William Duke

Ma William Le Mesurier
Clau Hamilton Archer Hill
Cell Edward Francis Bunbury

Col Reginald Henry Mahon
Lieut.-Col Alexander Fleetwood Pinhey
Capt Allen Thomas Hunt

Walter Bradock
James Moillon
Pirajinao Bapu Sahib Chhatge

Robert Woodburn Gillan
John Walter Hose
Charles Ernest Vear Goumont

Harryington Verner Lovett
Herbert Lovell Bates
George Gilbert White
I rederic Beadon Bryant
Lieut.-Col. Herbert Lionel Showers
Frank George Sly

A Companion wears from the left breast a badge (not returnable at death) of the same form as appointed for a Knight Commander, but of smaller size, pendant to a like ribbon of the breadth of one and a half inches

Sovereign of the Order—The King
Emperor of India

Grand Master of the Order—Lord
Hardinge

Honorary Knights Grand Commanders.
(G C I E)

The ex-Emperor of Korea
Extra Knight Grand Commander
(G C I E)

The Duke of Connaught
Knights Grand Commanders (G C I E)

The Most Eminent Order of the Indian Empire

Secretary, Lieut.-Col Sir A H McMahon
Registrar, Col Sir Douglas Dawson

OFFICERS OF THE ORDER

F W Newmarch
Sardar Dajit Singh of Jullunder
Lt.-Col Raj Kumar Bir Bikram Singh
Walter Maude
Bertram S Carey
Michael Nathaniel
Henry A Brooke Crump
William James Reid
Major Baird Barrat Vrs
O V Bosanquet
Walter Gannell Wood
John Cornwall Goldie

This Order, instituted by H M Queen Victoria Empress of India, Jan 1st, 1878, extended and enlarged in 1880, 1887, 1892, 1897, and 1902 is conferred for services rendered to the Indian Empire and consists of the Sovereign, a Grand Master, thirty-two Knights Grand Commander, ninety-two Knights Commanders, and an indefinite number of Companions (not exceeding, without special statute, 20 nominations in any one year), also Bachelors and Honorary Members over and above the vacancies caused by promotion to a higher class of the Order, as well as certain additional Knights and Companions appointed by special statute Jan 1st, 1909, commemorative of the 50th anniversary of the assumption of Crown Govt in India

The Insignia are (1) The Collar of gold, formed of elephant, lotus flowers, peacocks in their pride, and Indian roses, in the centre the Imperial Crown, the whole linked together with chains, (2) The Star or the Knight Grand Commander, comprised of five rays of silver, having a small ray of gold between each of them, the whole alternately plain and scaled, issuing from a gold centre, having thereon Her Majesty Queen Victoria's Royal Embley, within a purple circle, edged and lettered gold, inscribed *Imperial Crown gold*, (3) The Badge, consisting of a rose, enamelled gules, barbed vert, and having in the centre Her Majesty Queen Victoria's Royal Embley, within a purple circle, edged and lettered gold, inscribed *Imperial Crown gold*, (4) The Badge, consisting of a rose, enamelled gules, barbed vert, and having in the centre Her Majesty Queen Victoria's Royal Embley, within a purple circle, edged and lettered gold, inscribed *Imperial Crown gold*, (5) The Badge, consisting of a rose, enamelled gules, barbed vert, and having in the centre Her Majesty Queen Victoria's Royal Embley, within a purple circle, edged and lettered gold, inscribed *Imperial Crown gold*, (6) On his left breast a star, similar to that of the first class, but the rays of which are all of silver

The above mentioned Insignia are returned at death to the Central Chancery, or if the Knight was resident in India to the Secretary of the Order at Calcutta

The Haq of Cutch
Lord Lansdowne
Lord Harris
The Nawab of Tonk
Sir James Lyall
The Nawab of Kalat
The Wai or Kalat
Lord Sandhurst
Maharaja of Karauli
Thakur Sahib of Gondal
Thakur Sahib of Mori
Sir George Faudel-Phillips
The Maharaja of Benares
Sir Sher Muhammad Khan of Paniput
Lord Curzon of Kedleston
The Maharaja of Jaipur
The Maharaja of Orchha
Lord Amphilhil
Maharaja of Bundi
General Sir Alfred Gaselee
The Maha Rao of Sirohi
The Aga Khan
The Maharaja of Travancore
Lord Jamnagion
The Begam of Bhopal
Sir Edmund Ellis
The Nawab of Jangira
Sir Arthur Lawley
The Maharaja of Bikaner
Lord Sydneyham
Lord Kitchener
The Nawab of Rampur
Lord Carmichael
Maharaja of Kashmir
Sir Louis Dane
Maharaja of Bobbili
Lord Stanmoreham
Sir Guy Ffiewood Weldon
The Maharaja of Patiala
The Maharaja of Jhampur
The Mir of Bhanpur
The Raja of Cochin
The Nawab of Dacca
Lord Penland
The Raja of Pudukottai
Lord Wilmington
Maharaja of Vanshatir
The Maharaja of Vanshatir

Honorary Knights Commanders

(K C I E)

Sir Leon D Clement-Thomas
H E Sir Hussain Khan, Mookher-ed-

Sir Sven Hedlin
The Sheikh of Mehamerah
Gen Sir Albert Houtum Schindler
The Sheikh of Koweit
The Sultan of Shehr and Mohalla

Knights Commanders (K C I E)

Sir Alexander Meadows Rendel
Sir George Christopher Moleworth Birdwood

Surg-Gen Sir Benjamin Simpson

Sir Albert James Leppoc Cappel

Sir Donald Mackenzie Wallace

Sir Alfred Woodley Croft

Sir Bradford Leslie

Sir Arthur Nicolson

Sir Guilford Moleworth

Sir Frederick Russell Hogg

Raja of Venkatasiri

Sir Henry Mortimer Durand

Sir Arthur George Macpherson

Sir Henry Stuart Cunningham

Raja of Lunawara

Sir Roper Lethbridge

Sir Edward Charles Kay II Ollivant

Sir Henry Hoyle Howorth

Sir John Lambert

Baron Inchcape

Sir Henry Kevenshaw Thubiller

Sir Wm R Brooke

Maharaja of Gidhanur

Lieut-Col Sir Adelbert Cecil Talbot

Maj-Gen Sir Thomas Deanehy

H H Maharaja of Mysore

Sir Henry William Bliss

Nawab of Loharu

Col Sir William Bisset

Sir John Jardine

Rear-Admiral Sir John Hely

Col Sir Thomas Holdich

Sir Arthur Wilson

Sir Andrew Wingate

Raja Sir Harman Singh, Aluwalla

Sir S Subramanaya Aiyar

Sir Alexander Cunningham

Sir Henry Evan Nicholson James

Nawab Sir Shahbaz Khan, Bugti of Baluch-

Sir James George Scott

Maharaja of Darbhanga

Col Sir Samuel Swinton Jacob

Sir Lawrence Hugh Jenkins

Sir Herbert Liffell White

Surg-Gen Sir Benjamin Franklin

Sir Frederick Augustus Nicholson

Sir Arthur Upton Karslaw

Raja Dhruv of Shikhar

Sir Gunninghame Rieu Gmesb, Child of Mera

(senior branch)

Sardar Sir Ghans Bahadur, Katsani

Breret-Col Sir Buchanan Scott

Col Sir John Walter Offley

H H Raja of Sallua

Lieut-Col Sir Francis Edward Younghusband
Major-General Sir James R T Macdonald
Sir Ugyen Wangchuk, Tongsa Penlop of
Bhutan
Sir Fredric Styles Phillippe Tely
Lt-Col Sir Arthur Henry McLehon
Gen Sir Donald James Sim McLeod
Maharaja of Barampur
Sir Francis Whitmore Smith
Nawab of Palas
Rajgarh H H Raja Sir Bane Singh Bahadur
Sir Thomas Gordon Walker
Sir Arthur Maylor Wollaston
Sir Thomas Henry Holland
Nawab of Hyderabad
Lieut-Col Sir George Olat Roos-Kepell
H H Maharajadhiraja of Kishangarh
Raja of Alambabad
Sir Trevorwyn Rashleigh Wynne
Surg-Gen Sir Gerald Bomford
Sir Richard Morris Dane
Maharajadhiraja of Burdwan
Raja of Poonth
Prince Ghulam Muhammad Ali, Khan Bahadur
Sir William Stevenson Meyer
Sir Wilhelm Schlich
Sir Theodore Morton
Maj-Gen Sir Robert Irvin Scalon
Sir John David Rees
Rear-Admiral Sir Edmund John Warre Slade
Sir John Benton
Sir Frederick William Duke
Sir Archdale Earle
Sir Charles Stewart-Wilson
Maj-Gen Sir Malcolm Henry Stanley Grover
Sir Charles Raife Cleveland
Lieut-Gen Sir Douglas Haig
Lieut-Col Sir Hugh Daly
Sir Henry Parsall Burt
Sir James Houssemayne Duboulay
Sir Ragendra Nath Mukhari
Lieut-Col Sir Henry Beaufoy Thornhill
Sir Gangadhar Madho Chintavis
H H Nawab of Jaora State
H H Raja of Sitama State
Raj Sahib Sir Amarsinhji Bhanesinhji (Vanbaner)
Sir Ram Krishna Gopal Bhandarkar
Sir Michael Ellice
Rear-Adm Sir Colin Richard Keppel
Sir John Stanley
Sir Saint-Hill Barclay-Wilmot
Col Sir Percy Zachariah Cox
Sir Francis Edgar Spring
Maharaja Sri Sir Vikrama Deo
Rana Sir Shomaz Singh (U P)
H H Maharaja of Alwar
H H Maharawal of Patitgarh
Divan Bahadur Sir Seth Kasurhand Daga
H H Maharaja of Bikanar State, Bundelkhand
Gen Sir Slowbry Thomson
Sir George Abraham Grierson
Sir John Twigg
Maj-Gen Sir Francis Henry
Rutherford
Sir George Macartney

Lieut-Col John Ramsay
 Robert Bates Joyner
 Charles George Palmer
 Lieut-Col Samuel John Thomson
 Lieut-Col Sir David Parkes Masson
 Lieut-Col Frederick Fitzgerald MacCartie
 Rai Bahadur Sir Bipin Krishna Bose
 P C H Snow
 Hony Lieut-Col Kunwar Bir Bikram Singh
 Lieut-Col A B Mlinchinn
 W T Van Someren
 Charles Still
 Col H K McKay
 A Izat
 Rai Bahadur Dhanpat Rai
 Lieut-Col W B Brownling
 Lieut-Col J J Holdsworth
 Jack Francis Needham
 Robert Gilles
 Vishwanath Patankar Madhava Rao
 Col Walter Gaven King
 James Sykes Gamble
 Sir George William Forrest
 Lieut-Col Frank Popham Young
 Reginald Hawkins Greenstreet
 Khan Bahadur Kazi Jalal-ud-din, Ahundazada,
 of Kandahar
 John Sturrock
 John Stuart Bercsford
 Lieut-Col Malcolm John Meade
 Edward Louis Cappell
 Sir Lancelot Hare
 George Moss Harriott
 Frederick George Brunton Trevor
 Rai Bahadur Kallika Das Datta
 Diwan Bahadur P Rajaratna bhadajyar
 Sir Walter Charleton Hughes
 Edmund Penny
 Henry Marsh
 Col Aymer Martin Crofts
 Lieut-Col Bertrand Evelyn Mellish Gurdon
 Rai Bahadur Krishna Chandra Bose
 Henry Felix Hertz
 Courtenay Walter Bennett
 H H Raja Sir Bhure Singh
 Rear-Admiral Walter Somerset Goodridge
 Col Solomon Charles Frederick Pelle
 Bertram Prior Standen
 Henry Alexander Sim
 Lieut-Col Sir James Robert Dunlop Smith
 Col John Crummin
 Lieut-Col Granville Henry Loch
 Farquhar Kennedy Tarapurvala
 Babu Kail Nath Mitter
 Sir William Jameson Soulsby
 Col Oswald Claude Radford
 Col William John Read Ramsford
 Major General George Kenneth Scott-Moncrieff
 Lieut-Col Thomas Edwin Scott
 Lieut-Col Laurence Austine Waddell
 Col Asaf Ali Khan
 Subadar-Major Sardar Khan
 Hony Capt Jasim Khan
 Commander General Edward Holland
 Sidney Preston
 Sir Murray Hammett
 Sir Alexander Pedler
 Sir Richard Amphlett Lamb
 Alexander Lauzun Pendock Tucker
 Diwan Bahadur Kishnaswami Rao
 Lieut-Col John Clibborn
 Col George Winglee
 Lieut-Col George Hart Desmond Gwiltlett

Arthur Henry Wallis
 Alexander Johnstone Dunlop
 George Herbert Dacres Walker
 Lieut-Col Alexander Fleetwood Pinhey
 Rai Bahadur Nana Chaud
 Sir Spencer Harcourt Butler
 Lieut-Col Frank Cooke Webb Ware
 Hony Major Thomas Henry Hill
 Alexander Porteous
 Col Thomas Edward Lindsay Bate
 Hon Lockhart Alathew St Clair
 Marshall Reid
 Rao Bahadur Pandit Sahdeo Peshad
 Stuart Milford Fraser
 Lieut-Col Herbert Lionel Showers
 Maj-Gen Francis Edward Archibald Chamber
 Lt-Gen Ernest De Brath
 Rai Bahadur Sir Pratul Chandar Chatterji
 Frederick Gurr Alactean
 Walter Bernard de Winton
 Algernon Elliott
 Lt-Col Charles Arnold Kemball
 Sir Herbert William Cameron Carnaud
 Lieut-Col John Hodding
 Edward Giles
 Haviland Le Mesurier
 Robert Nathan
 Lieut-Col Alfred William Alcock
 Arthur Hill
 Douglas Donald
 Jagdish Chandra Bose
 Mehlar Bhujal-ul-Malik, of Chitral
 Mir Alizamund Nazam Khan, Mir of Hunza,
 Raja Sikandar Khan, of Nagar
 Sir William Dickson Cruickshank
 Thomas Jewell Bennett
 Henry Wenden
 Charles Henry Wilson
 Rao Bahadur Shyam Sundar Lal, Diwan of
 Krishnagar
 Robert Herriot Henderson
 Mir Alshuhra Khan, Kasani
 Nawab Fateh Ali Khan, Kazilbash
 Faridoonji Janshedji
 Charles Henry West
 Charles Brown
 George Huddleston
 Lieut-Col Montagu William Douglas
 Charles James Keene
 Brigadier-General Havelock Hudson
 Lieut-Col Arthur D'Arcy Gordon Bannerman
 Rai Bahadur Ram
 Robert Douglas Hare
 William Bell
 Claude Hamilton Archer Hill
 Edward Henry Seaman Clarke
 Webster Boyle Gordon
 James Walker
 Lieut-Col Robert Arthur Edward Benn
 Madhu Sudhan Das
 George James Fernin
 Raja of Killa Parthabgarh
 Sir Sanbaran Nayak
 William James Porter
 Stephen Finney
 Edward Waller Stoney
 Alexander Morton
 Walter Home
 C W Waddington
 Raja Rampal Singh of Kori Sadhul
 Khan Bahadur Barjori Dornaji Patel
 John Claude White

1 Lieut Col Francis Frederic Perry
 1 Lieut Col Francis Granville Neville
 1 Lieut Col Stuart Hill Godfrey
 1 Lieut Dorey Brooke Blakeney
 Khan Bahadur Sahibzada
 Abdul Qayyum
 Khan Bahadur Stuart King Macomber
 Stuart Lath

Col L. L. Maxwell
William Ellis Jardine
Thomas Corby Wilson
Col Alfred Horsford Bingley
Sir Frederick Leach Halliday
Lt-Col Charles Thorp Jessop
Percy Wyndham
Hugh Spencer
Charles Ernest Low
Cecil Ward Chichester Plowden
William King-Wood
Lieut Col Richmond Trevor Crichton
Huan Tai, Sawbwa of Lathpa
Albert Claude Vickers
Raja Ram Singh of Hampura
Bhawan Bahadur P. Rajagopala Chavartar
Mawli Kachin Khan
Mubammad Aziz-ud-din Khan
Mubammad Ali
Kall Prasanna Gho-shi

Campbell
 common
 Tiwara
 1
 Godfre Butler Hunter 1 en
 Raj Bahadur
 Col James Henry Elias Brier
 John Newlands
 Col James
 Lieut - Col. Henry Farlin
 Col Robert Nell Campbell
 Col Robert Daves Butler
 Montagu Sheard Daves Know
 Major Stuart George Rawlings
 Capt Cecil Godfrey Rawlings
 Edgar Thurston
 Raj Nathi Lal Bahadur of Kharja
 Raj Bahadur Bura Singh
 James Brumfit Brumfit
 Frederick James Wilson
 Henry Wheeler
 Reginald Edward Enthoven
 Col Wilfred Mallison
 Henry Vane Cobb
 Reginald Hugh Breton
 Nriyga Gopal Basu
 1
 Philip Berkeley Souther

William Didsbury Sheppard
COL. Frederick Macrae
Lieut.-COL Victor Reginald Brooke
Oswald Vivian Bosanquet
Tanjore Madava Rao Amanda Rao
John Hubert Starbail
William Arthur Johns
Charles Miesche Smith
Lieut.-COL Arthur Grey
John Barr Wood
Lt.-COL George Grant Gordon
COL Frank Goodwin
Lieut.-COL George Frederick Campbell
Archibald Young Gibbs
Andrew Biscoe Barnard
James Adolphus Gaidler
John Paul Warburton
William Douglas Johnston

James Herbert Seabrook
James Walter Wallace
James Herbert Seabrook
Walter Colley Madge
Lieut.-Col. Wallace Christopher R.
James Scott

The Indian

Richard Green
Thomas Webster
William Thomas
Edward Smith
Dunstan Bapstham
Nedder John Dobbs
Henry Robert Cogswell
Henry William Richard Browne
Maurice de Pourroy Webb
Hutch William Orme
Isaac Col Charles Archer
Isaac William Wrench
Arthur William Talow Pope
Nicholas Dodd Watson Bell
Frederick William Thibaut
Princess William Waron
John Main Chantier de Lotbiniere
Arthur Francis Ferguson Jarvis

1. Major Robert John O'Connell
Lieut. Robert John Ward
Thomas Robert John Ward
Lieut. Col. Charles Ferguson Campbell
Lieut. Col. Harry Davis Watson
Hon. Brig. Gen. William George Keppel
Commander Sir Charles Leopold Colville
Lt. Col. Sir David Prinn
Col. William John Dunlop Dundee
Hon. Capt. Malik Umar Hayat Khan, Tirwa
Sir Ibrahim Pashintool
Pashintool Lal
Edward Albert Gale
Robert George Kennedy
Hon. Col. Arthur Dorman
Lieut. Anthony Dorman
Col. Henry Thomas Pea-
rce
Lieut. Colonel Sydney Clarke Campbell

Lieut Col James Le Grand
Lieut Col Arthur Campbell
John Bolter
John Strickland
Frederica Palmer
Shirrant Annand Rae Gaekwar
Thomas Henry Willingdell Biddulph
Surgen-Lieut Col. Sir Warren Richmond
Lawrence Alexander John Maunsel
Lieut-Col Laughlin George Claude
Francis St George Manwaring Smith
Lieut Col David McNeill Babington
Sir Chumbhar Madhavai
Samuel Dugby Razhamarnani Sundaram Aligar SI

William Herbert Grant
 Alfred Hamilton Grant
 Sao Mwangi, K.S.M.
 of Kawango Hwe
 Lieut-Col Norman MacLeod
 Sir Arthur Maitland Ker
 Rear-Admiral George Hayley-Hewett
 Ralph Buller Hughes-Buller

Lieut Col Edward Charles Bayley
 Ral Bahadur Lal Shoo Prasad
 Frederick William Johnstone
 Maj Arthur Louis Bickford
 Edward Gelson Gregson
 William Malcolm Halliv
 Col Benjamin William Marlow
 Herbert Gerald Tomkins
 Henry Whitby Smith
 Major Francis Beville Pridaaur
 Lieut Col Charles MacTaggart
 Nawab Mirza Shahid Husain
 Ral Krishan Shah Bahadur
 Hopetoun Gabriel Stokes
 Lieut Col Leonard Rogers
 Nawab Muhammad Abdul Majid
 Indovie Charles Porter
 Henry Sharp
 Arthur Venus
 Mahamahopadaya Hara Prasad Shashtri
 Lt Col Allen McComaghey
 Nwarib Kaisar Khan, Chief of the Nagassi
 Tribe
 Ral Bahadur Divyan Jyamat Ral
 Robert Charles Francis Volkers
 Henry Hubert Hayden
 Alexander Alured
 George Frederick Arnold
 George Cunningham Buchanan
 William Rucker Stikman
 Edward Robert Kaye Blenkinsop
 George Sandy Hart
 Nawab Muhammad Salamuallah Khan Bahadur
 Jagindar of Deulghat
 John Henry Kerr
 Col George Henry Evans
 Lieut Col Henry Burden
 Maharaja Raghunath Singh, of Dhasul
 George William Kuchler
 John Ghest Cunningham
 Rev John Anderson Graham
 Francis Hugh Stewart
 Louis James Kershaw
 William Taylor Cathcart
 Murechjee Byramjee Dadabhoy
 Hugh Murray
 Swal Rao Raja Raghunath Rao Dinkar
 (Gwalior)
 Pandit Kailas Narayan Haksar
 Lieut Col Ernest Douglas Moneys
 Major Hugh Roderick Stockley
 Mohshagundam Viseswaraya
 Lieut Col Richard Godfrey Jones
 Jagindar Desraj Urs
 Major Arjune Dretton Dew
 Divan Bahadur Divan Amar Nath (Kashmir)
 Lieut Col James Reed Roberts
 Lieut Col Lawrence Impey
 Col Alexander William Macrae
 Arthur Ernest Lawson
 Alhion Raghunath Banerji
 Major Frederick Fenn Lives
 Col William Burgess Wright
 Cecil Archibald Smith
 Sardar Shashur Singh, of the Jind State
 Babu Gurabsh Singh Bedi
 Col Gilbert Walter Pailin
 Lieut Col Robert Edward Pemberton Pigott
 Lieut Col William Daniel Henry

General Branch Leatunge.
 Major John Glennie Greig
 Sardar Naoraji Pundamji
 Vata Lakshman Aleram Chief of Thana-Dewi
 Claude Alexander Barron
 Leonard William Reynolds
 Lt Col Percy Moleworth Sykes
 Charles Archibald Walker Rose
 Major Arthur Dennis Gilbert Ramsay
 Major Rudolph E T Hoags
 Capt John Mackenzie
 Peter Langrishe Moore
 Alfred Chatterton
 Major Arthur Abercromby Dill
 Lt Col John Lawrence William French-Vullen
 Bernard Coventry
 Albert John Harrison
 Richard Herriott Campbell
 Rno Bahadur Bangalore Perumal Annaswami
 Muddihar
 Sidney Kilmer Levett-Yents
 Frederick George Wigley
 Prfulla Chandra Ray
 Col Francis Raymond
 Col Michael Joseph Tighe
 Lieut Col William Bernard James
 Major Sydney D'Aguiar Crookshank
 Edward Denison Ross
 John Hugh Cox
 Khan Bahadur Muhammad Israr Hasan Khan
 Major Reginald O Bryan Taylor
 David Wann Alkman
 Ral Bahadur Pandit Hari Krishan Kaul
 Lieut Col Frederick William Wodehouse
 Col Richard Henry Ewart
 Col Malhiand Cowper
 Thomas Walker Arnold
 Lieut Col Charles Henry James
 Alexander Blake Shakespear
 John Hope Simpson
 Major Hugh Stewart
 Major William Glen Liston
 Lieut Col Edwin Henry de Vere Atkinson
 Walter Stanley Talbot
 Frank Adrian Lodge
 Col Robert William Layard Dunlop
 Lieut Col Walter James Buchanan
 Hrishti Kesh Laha
 Nalin Bhisan Gupta
 Joseph Terence Owen Barnard
 Lieut Col Townley Richard Filgate
 Alexander Macdonald Brouse
 Charles Cahill Sheridan
 Capt Herbert de Lisle Pollard-Lowley
 Major William Wilfrid Bickford
 Henry Cuthbert Streetfield
 Major Cecil Kaye
 William Foster
 Sardar Appaji Rao Akhkar
 W H Arden-Wood
 Sardar Arur Singh
 W C Ashmore
 Major Blackham
 P R Cadel
 Capt W L Campbell
 Major G S Crawford
 W C V Dundas
 Lt Col V N Hickley
 H F Howard
 J H Lacey
 T Mercer

This Order was instituted Jan 1, 1878, and for a like purpose with the simultaneous created Order of the Indian Empire it consists of the Queen and Queen Mother with some of the Royal Princesses, and the female relatives of Indian Princesses or of persons who have held conspicuous offices in connection with India. Badges, the royal cipher in jewels with an oval surmounted by an Heraldic Crown and attached to a bow of light blue watered ribbon, edged with white Designation, the letters G I

This Order was instituted Jan 1, 1878, and for a like purpose with the simultaneous created Order of the Indian Empire. It consists of the Queen and Queen Mother with some of the Royal Princesses, and the female relatives of Indian Princesses or of persons who have held conspicuous offices in connection with India. Badges, the royal cipher in jewels with an oval surmounted by an Heraldic Crown and attached to a bow of light blue watered ribbon, edged with white Designation, the letters G I

Sovereign of the Order
EMPEROR OF INDIA

Her Majesty The Queen
 H M Queen Alexandra
 H M the Queen of Norway
 H M the Princess Royal
 H R the Princess Victoria
 H R the Princess Louise of Schleswig-
 H R the Princess Henry of Battenberg
 H R the Dowager Duchess of
 H I and R the Dowager Duchess of
 Saxe Coburg and Gotha
 H R the Duchess of Albany
 H R the Duchess of Cumberland
 H R the Princess Fredericka Baronesse of
 von Pawel-Rammingen Grand Duchess of
 H R the Dowager Grand Duchess of
 Mecklenburg Strelitz
 H R the Princess Ferdinand of Roumania
 H I and R the Grand Duchess Cyril of
 Russia
 H R the Hereditary Princess of Hohenlohe
 Langenburg
 H R the Crown Princess of Sweden
 H R the Princess Victoria Elizabeth
 H R the Princess Charlotte, Hereditary Princess of
 Augustine-Charlotte
 H R the Princess
 H R the Princess Marie-Louise of Schleswig-
 Holstein
 H R the Princess Kintloss
 Baronesse Kintloss
 Dowager Countess of Mayo
 Mrs Charles Coates
 Lady Jane Emma Crichton
 Dowager Countess of Lytton
 Dowager Baronesse Lawrence
 Dowager Temple
 Lady Temple
 Dowager Baronesse Napier of Magdala
 Lady Grant Duff
 Dowager Marchioness of Dufferin and Aves
 Mrs George Cornwallis-West
 Baronesse Reay
 Baronesse of Lansdowne
 H R Maharani of Cooch Behar
 Baronesse Harris
 H R Maharani of Gwalior
 Constance Mary Baronesse Wenlock
 H R Maharani Sahib Chitma Bai Gackwar
 H R Hani Sahib of Gondal
 H R the Dowager Maharani of Mysore
 H R George Hamilton

[illegible]

H. H. the Maharani Sahiba of Udaipur
Alice, Baroness Northcote
Nora, Henrietta, Countess Roberts
Amella Maria, Lady Whit
Mary Katherine, Lady Lockhart

Baroness Ampthill
Countess of Alinto
Marchioness of Creve
H. H. Begum of Bhopal
H. H. Maharani Shri Nundkavayarba

THE KAISAR-I-HIND MEDAL.

This decoration was instituted in 1900, the preamble to the Royal Warrant—“which was amended in 1901 and 1912—being as follows—“Whereas We, taking into Our Royal consideration that there do not exist adequate means whereby We can reward important and useful services rendered to Us in Our Indian Empire in the advancement of the public interests of Our said Empire, and taking also into consideration the expediency of distinguishing such services by some mark of Our Royal favour Now for the purpose of attaining an end so desirable as that of thus distinguishing such services we have instituted and created, and by these presents for Us, Our Heirs and Successors, do institute and create a new Decoration,” The decoration is styled “The Kaisar-i-Hind Medal for Public Services in India” and consists of two classes. The Medal is an oval shaped Badge or Decoration—in gold for the First Class and in silver for the Second Class—with the Royal Cypher on one side and on the reverse the words “Kaisar-i-Hind for Public Service in India.” It is suspended on the left breast by a dark blue ribbon

Recipients of the 1st Class.

Abdus Samad Khan of Rampur
Ahmad, Khan Bahadur Qazi Khalil-ud-Din
Alam, The Rev Samuel Scott
Almarahand, Rao Bahadur Ramanamayan
Ampthill, Margaret, Baroness
Aethon, Albert Frederick
Barber, Benjamin Russell
Barnes, Major Ernest
Beary, Francis Monagu Algemon
Beck, Miss Emma Josephine
Bell, Lt-Col Charles Thorhill
Benson, Lady
Brantley, Dr Charles Albert
Bhandari, Rai Bahadur Gopal Das
Bhikari, Maharaja of
Bingley, Bng-General Alfred
Birlikar, Sardar Parashram Krishnarao
Booth-Tucker Frederick St George de Lautour
Bosquet, Oswald Vivian
Bose, Dr Kalash Chandra
Bramley, Percy Brooke
Bry, General Denys Desauumarez, in Balu-chistan
Broadway, Alexander
Broughton, James Forest
Buchanan, Rev John
Burn, Richard
Burnett, General Sir Charles John
Caban, Denis
Campbell, Lieutenant Colonel Robert Neil
Campbell, John Montion
Carrion, Marcus Bradford
Carrion, Lady
Carter, Edward Clark
Chandra, Rai Bahadur Hari Mohan

Chatterton, Alfred
Chaudhuri, Raja Sarat Chandra Rai
Chetty, Dewan Bahadur K. P. Puttanna
Chibhai, Adeshit Dinsaji
Chitambar, Shantkar Madho
Coldstream, William
Comley, Mrs Alice
Cousens, Henry
Cox, Arthur Frederick
Crawford, Francis Colom
Dane, Lady
Darbhanga, Maharaja of
Davies, Arthur
Davies, Mrs Edw
Dawson, Lieutenant-Colonel Charles Hutton
Deane, Lieutenant-Colonel Herbert Edward
Deobombur, Lieutenant-Colonel Albert C Joly
Devys (Junior Branch), Raja of
Dyal Singh, Sardar Alan, Sardar Bahadur
Dybern, James Emile
Dyson, Lieutenant-Colonel Thomas Edward
Earle, The Honble Sir Archdale
Egerton, William
Ewing, The Rev Dr J C R
Frith, Mrs E J (with Gold Bar)
Francis, Edward Bulchum
Ghosh, Mr Jyotsnath
Ghosh, Mohandas Karmachand
Glazebrook, N S
Gonzaga, Rev Mother
Gratnam, The Rev John Anderson
Gratnam, Major Henry William
Guilford, The Rev E (with Gold Bar)
Guthrie, Maharaja of
Guthrie, Lieut-Colonel Arthur
Hahn, The Rev Ferdinand
Haig, Lieutenant-Colonel Patrick Balfour
Hall, Harold Fielding Patrick
Hamilton, Major Robert Edward Archibald
Harvest, Lieut-Colonel Herbert de Vere
Hildesley, The Rev Alfred Herbert
Hodgson, Edward Marsden
Hogan, W J Alexander
Holderness, Sir Thomas William
Home, Walter
Howard, Mrs Gabrielle Louise Carolin
Hume, The Rev R A
Humphreys, Robert
Husband, Major James
Hutchinson, Sir Sydney Hutton Cooper
Hutchinson, Major William Gordon
Huxta, The Maharani Jnan Manjari Kuon of
Hydari, Mrs Anna
Irvine, Lieutenant-Colonel Thomas Walter
Ives, Harry William Maclean
Jacob, Colonel Sir Samuel Swinton
James, Lieutenant-Colonel Charles Henry
Jankibai
Joshi, Ram Bhan Meghasham, Rao Bahadur
Kapoor, Raja Ban Bihari
Kierpatrick, Clarence
King, Mrs D

Recipients of the 2nd Class

Southon, Major Charles Edward
 Gough, Christina Phillips Agnes
 St. Leger, William Douglas
 St. Lucie, Rev. and Mother
 Stanes, Robert
 Stokes, Dr. William
 Suidico Prasad, Pandit
 F. Ward, The Rev. Antoine Marie
 T. Lat, Edalji Dornaji
 Taylor, The Rev. George Fritschard
 Taylor, Dr. Herbert F. Lechmere
 Thomas, The Rev. Stephen Sylvestre
 Tully, Harry Lindsay
 Tucker, Major William Hancock
 Turner, Dr. John Andrew
 Tyrell, Major Jasper Robert Joly
 Vaughan, Lieutenant-Colonel Joseph Charles
 Venugopala, Raja Bahadur
 Wagner, Rev. Paul
 Wake, Lieutenant-Colonel Edward St Aubyn
 Walker, Lady Fanny
 Walsby, George Edward Campbell
 Ward, Major Albert Euljah
 Wheeler, The Rev. Edward Montague
 Williams, Lieutenant-Colonel James Sutherland
 Williamson, the Lady
 Wilson Johnston, Joseph
 Winter, Edgar Francis Latimer
 Wood, Arthur Robert
 Young, The Rev. John, Cameron
 Youngusband, Arthur Delaval
 Edward

Abul Fattah, Moulayi Sayeed
 Abul Ghanai
 Abul Hussain, Mian Bhai
 Abul Kadir
 Abdul Majid Khan, Colonel Muhammad
 Abdul Majid Khan
 Abdui Rahmaan, Mahomed
 Abdui Rahim
 Abdur Razzak Khan, Subadar
 Adavani, Motiram Showkram
 Azma, Mohamed Khabul-Bin-Mohamed Kan
 Ali Shabaz, Shaikh
 Allen, Rev. Frank Van
 Amar Nath, Lala
 Amar Singh
 Anderson, Andrew
 Andrews, The Rev. Adam
 Annescom, Major Allen Mellers
 Apte, Hari Narayan
 Askwith, Miss Anne Jane
 Atkinson, Lady Constance
 Augustin, The Rev. Father
 Aziz Hussain, Khasan Sahib Mir
 Badr Farshad
 Bahmani Manohari
 Baker, Honorary Major Thomas
 Banerji, Professor Jamini Nath
 Banerji, Dr. Charles
 Baradar Sadashiva Krishna
 Bristley, Miss Jane Bissett

[illegible]

Bay, U Kan
 Bayley, Lieut - Colonel Edward Charles
 Beatson-Bell, Nicholas Dodd
 Beg, Mirza Kamil Beg Fridun
 Bees, James Theodore
 Beville, Lieutenant-Colonel Francis Granville
 Bhagwanadas, Bai Zaoerbai
 Bhaajan Lal
 Bhande, Pandit Balkrishna Govind
 Bhide, Raghoo Jamaradhan
 Bhut, Chhotelal Goverdhan
 Biseshwar Nath, Lala
 Biswas, Babu Ananda Mohan
 Blackham, Major Robert James
 Blackwood, John Ross
 Blake, The Rev William Henry
 Blenkinsop, Edward Robert Kaye
 Bolster, Miss Anna
 Borrah, Babu Balramayan
 Bose, Miss Mona
 Bowen, Griffith
 Brahmanand, Pundit
 Brandner, Mrs Isabel
 Bremner, Major Arthur Grant
 Brook, Miss Lillian Winifred
 Brough, The Rev Anthony Watson
 Browne, Charles Edward
 Brown, Dr Edith
 Burt, Bryce Chudleigh
 Cain, Mrs Sarah
 Campbell, The Rev Andrew
 Campbell, Miss Kate
 Campbell, Miss Susan
 Campbell, Miss Mary Jane
 Campbell, The Rev Thomas Vincent
 Carr, Miss Emma
 Carr, Thomas
 Catherine, Sister
 Castell, Major Gilbert Landale
 Cecilia, Sister Fannie
 Chamberlain, The Rev William Isaac
 Chandler, The Rev John Scudder
 Chatterji, The Rev K C
 Chandhuri, Purna Chandra
 Chitale, Ganesh Krishna
 Churchward, F A.
 Chye, Leong
 Chaney, John Charles
 Clerk, Honorary Major Louis Arthur Henry
 Clutterbuck, Peter Henry
 Coombs, George Oswald
 Correa, Miss Marie
 Corthorn, Miss Alice
 Cottle, Mr Adela
 Coxon, Stanley William
 Cumming, James William Nicol
 Cummings, The Rev John Ernest
 Cutting, Rev William
 Dairymple-Hay, Charles Vernon
 Das, Ram, Lala
 Das, Nathuram, Lala
 Das, Niranjan
 Datta, Dr Dina Nath Pritha
 Dawe, Miss Ellen
 Dawson, Mrs Charles Hutton
 Deane, George Archibald
 Deodhar, (Dopu) Krishna
 Deogl, Hazil Ahmed, Khan Sahib
 Dehantsov, Mrs Mary Aphrasia
 Desmond, Sergeant J
 Dewes, Lieutenant-Colonel Frederick Joseph
 Dharmaratne, Sairat Bahadur
 Dharma Chaud, Lala
 Dilhard, J. Gunn

Dip Singh, Lieutenant
 Douglas, The Rev John
 Dun, Maung Ne
 Dundas, Charles Lawrence
 Dunnop, Alexander Johnstone
 Durjan Singh, Thakur U
 Dutta, Nishita Harman
 Eagles, Thomas Cazaly
 Edgell, Lieutenant-Colonel Edward Arnold
 Edgesome, George
 Emanuel, Mrs
 Evans, The Rev John Ceredig
 Evans, Miss Josephine Annie
 Farrer, Miss Ellen Margaret, C
 Farzand-i-Ahmad Khan Bahadur, Kazi Saiyid
 Freyre, The Rev Father Eleanore
 French, Lieutenant-Colonel Thomas
 Friesman, Thomas Charles
 Fritchett, Miss
 Forman, The Rev Henry
 Fox, Alfred Charles
 Frances, Sister Jane
 Fraser, William
 Fraser, Robert Thomson
 Fryson, Hugh
 Gaffar, Mrs Shivagauri
 Galibai Bai
 Garthwaite, Liston
 George, Miss Jessie Eleanor
 Godfrey, Thomas Leonard
 Goenka, Baijnath
 Goodbody, Mrs
 Gorman, Patrick James
 Goswami, Sri Sri Naradev Dakshinpat Adhikar
 Grant, Major John Weyman
 Gowardhandas, Chattrabhai
 Grant, Mrs, nee Miss Lillian Blong
 Grant, Miss Jean
 Gray, Commissary William David
 Greany, Peter Alvaie
 Greenfield, Miss R
 Griessen, Albert Edward Pierre
 Gumbley, Mr Douglas
 Gunne, Trimback Raghunath
 Gyl, U Pet
 Hazrat, Imab Ali
 Hanrahan, W G
 Harrison, Henry
 Harrison, Robert Tullis
 Hart, Miss Louisa
 Harvey, Miss Rose
 Hatch, Miss Sarah Isabella
 Haworth, Major Lionel Berkeley Holt
 Hayles, Miss Mary Lavinia
 Henderson, Miss Agnes
 Higby, Miss Sarah J
 Higgins, Andrew Frank
 Hill, Elliott
 Hoffman, The Rev Father John, S J
 Holbrooke, Major Bernard Frederick Roper
 Holden, Major Hyla Napier
 Holland, Dr Henry Tristram
 Homer, Charles John
 Hope, Dr Charles Henry Standish
 Hughes, Thomas Onslow
 Hunter, Honorary Captain James
 Hutchison, Dr John
 Ihsan Ali
 Jaisie Bai (Mrs Pettit)
 Jalnath, Pandit
 Jambharswari, A Horgo vandas
 Joglekar, Rao Sahib Ganesh Venkatesh
 Johnson, Augustus Frederick
 Jones, The Rev John Peter

Rattanai Mlaji
 Ray, Harendra Nath
 Ray, Babu Sarat Chandra
 Raza, Ali Khan, Sardar
 Red, Mrs. Lilian
 Richardson, Mrs. Catherine Stuart
 Rita, Siddani Edward
 Roberts, Captain Charles Stuart Hamilton
 Robinson, James
 Robinson, Lieutenant-Colonel William Henry
 Roe, Brigadier-General Cyril Harcourt
 Roe, Mrs. Edith Mary
 Roushar Lal, Lal
 Rukmabai, Dr.
 Rustumji Faridoomji
 Sadler A W Woodward
 Sahab Ram Kab
 Sahay, Lala Deonath
 Saint Monica, The Rev Mother
 Salkield, Tom
 Samarth, Wasudeo Mahadeo
 Samuels, Joseph
 Schultze, The Rev Frederick Volkmar Paul
 Scotland, Lieutenant-Colonel David Wilson
 Shah, Babu Lal Behari
 Shab, Mohamed Kamal, Saiyid
 Shah, Mohammad Nawaz
 Shah, Reverend Ahmad
 Shamath
 Sheore, Ragunath Baiwant
 Shyam Rikh, Raja Francis Xavier
 Shyam Sunder Lal
 Simco, Arthur Henry, Addenbrooke
 Simons, Charles Wyikins
 Simon, Sister M
 Sinclair, Reverend Leahy
 Singh, Ajpi Dhul
 Singh, Didar
 Singh, Babu Harmath
 Singh, Makkhan
 Singh, Raja Bahadur, Padmanand
 Singh, Babu Kamdhari
 Singh, Sita B. sh
 Singh, Subada Sher
 Singh, Kisildar Major, Hanwant
 Smith, Mrs Ellen
 Smith, The Rev Frederick William Ambery
 Steele, The Rev John Ferguson
 Steel, Alexander
 Stute, Oliver Harold Baptist
 Sri Ram Kunwar, Thakurain
 Somerville, The Rev Dr James
 Smith, Mrs Henry
 Smith, The Rev Frederick William Ambery

Stephens, John Hewitt
 Stephens, Mrs Grace
 Stevens, Mrs (Ethel)
 Stevenson, Surgeon General Henry Wickham
 Stewart, Major Hugh
 Stewart, Mrs Lilian Dorothea
 Stewart, Thomas
 St Joseph, J D
 Strip, Samuel Algeon
 Sultan Ahmed Khan
 Sunder Lal
 Sundrabai, Bai
 Surebhan Jangi
 Swanson, Mrs Florence
 Taleyarkhan, Mr Alaneekshah Cawasha
 Tame, Dr Gopal Rao Ramchandra
 Tarnpurwala, Fardunji Kuvarji
 Taylor, Rev Alfred Frideaux
 Taylor, Mrs Florence Frideaux
 Taylor, John Norman
 The, Maung Shwe
 Thein, Maung Po
 Theobald, Mrs
 Thomas, Samuel Gilbert
 Timothy, Samuel
 Thompson, R. C
 Thomson, Robert Douglas
 Thomson, The Rev G Nicholas
 Thoy, Herbert Dominick
 Tok, Maung Po
 Tok, Maung Ba
 Thorn, Miss Bertha
 Tomkins, Lionel Linton
 Tndball, Miss Emma
 Umar Khan, Malik Zorawar Khan
 Viswesvaraya, Mohshagundam
 Wait, Robert William Hamilton
 Wakefield, George Edward Campbell
 Walewaker, P Baburao
 Waller, Frederick Chighton
 Wares, Donald Horne
 Webb-Ware, Mrs Dorothy
 Weighel, Miss Anna Jane
 Western, Mrs Mary Priscilla
 Weller, Henry
 Wildman, Miss Elizabeth Annie
 Wiseman, Honorary Captain Charles; Sheriff
 Woerner, Miss Lydia
 Wood, The Rev A
 Xerbury, Miss J
 Young, Dr M. Y
 Zahur-ul-Husain, Muhammad

"Khan," has grown into a name used by descendants of the Ch'ia of Szechwan--It prefixed, "Mr." or "Esquire"

David—his "grandfather" (paternal), and *David* and *David*—State, also one in office,

medal, 1 1/2 inches in diameter is ordered to be worn immediately to the right of all war medals awarded by the Viceroy of India

Indian Order of Merit—This reward of valour was instituted by the H. E. I. Co. in 1872, to reward personal bravery without any reference to length of service or good conduct. It is divided into three classes and is awarded to native officers and men for distinguished conduct in the field. On the advancement from one class to another the star is surrendered to the Government and the superior class substituted but in the event of the death of the recipient his relatives retain the decoration. The order carries with it an increase of one-third in the pay of the recipient, and in the event of his death the allowance is continued to his widow for three years. The First Class consists of a star of eight points, 1 1/2 in in diameter having in the centre a ground of dark-blue enamel bearing crossed swords in gold, within a gold circle, and the inscription Reward of Valour, the whole being surmounted by two wreaths of laurel in gold. The Second Class star is of silver with the wreaths of laurel in gold, and the Third Class entirely of silver. The decoration is suspended from a simple loop and bar from a dark-blue ribbon 1 1/2 in in width with red edges bearing a gold or silver buckle according to class.

Order of British India—This order was instituted at the same time as the Order of Merit, to reward native commissioned officers for long and faithful service in the Indian Army. Since 1878, however, any person European or native, holding a commission in a native regiment, became eligible for admission to the Order without reference to creed or colour.

THE COST OF FAMINE

In the section on Famine (q v) the whole policy of the Government of India towards the relief of distress is sketched out and the broad results indicated. They are revealed as great. The Public Works Department, the civil authorities, and district boards arranged for the carrying out of numerous projects with famine labour. These comprised construction of roads, tanks and irrigation works and the reclamation of ravine land—all works of undoubted utility. Grants of £18,000,000 to £80,000,000 were given principally to persons in charge of working the famine relief, but the large sums were the extreme scarcity of food which was met chiefly by concession rates for the carrying of fodder on railways and the supply of hay from the forests. Much good work was done by non-official efforts and a considerable fund was raised to the amount of £27,124. The total cost of the famine to Government is estimated at £520,000,000, as against £22,130,000 in 1907-08. Good rains in July and September 1914 finally relieved the situation and ensured a good harvest crop.

Laws and the Administration of Justice.

European British Subjects

Whilst the substantive criminal law is the same for all classes, certain distinctions of procedure have always been maintained in regard to subjects. Until 1872 European British subjects of the High Courts were then enacted that the High Courts should be tried or punished by one of the highest class, who were also justices of the peace, and by judges of the Sessions Courts, but it was necessary in both cases that the magistrate or judge should himself be a European British subject. In 1883 the Government of India announced that they had decided to settle the question of jurisdiction over European subjects in such a way as to remove from the disqualification which is based merely on race distinctions. This decision, embodied in the Herbert Bill, aroused a storm of indignation which is still remembered. The controversy ended in a compromise which is thus summarised by Sir John Strachey ("India"), "The controversy ended with the virtual, though not avowed, abandonment of the measure proposed by the Government Act III of 1884, by which the law previously in force was amended, cannot be said to have diminished the privileges of European British subjects charged with offences, and it left their position as exceptional as before. The general disqualification of native judges and magistrates remains, but if a native of India be appointed to the post of district magistrate or sessions judge, his powers in regard to jurisdiction over European British subjects are the same as those of an Englishman holding the same office. This provision however is subject to the condition that every European British subject brought for trial before the district magistrate or sessions judge has the right, however trial be the charge, to claim to be tried by a jury of which not less than half the number shall be Europeans or Americans. Whilst this change was made in the powers of district magistrates, the law in regard to other magistrates remained unaltered." Since 1886 no distinctions of race have been recognised in the civil courts throughout India.

High Courts

The highest legal tribunals in India are the High Courts of Judicature. These were constituted by the Indian High Courts Act of 1861 for Bengal, Bombay and Madras, and later for the United Provinces, superseding the old supreme and Sudder Courts. The judges are appointed by the Crown, they hold office during the pleasure of the Sovereign, at least one-third of their number are lawyers, one-third are recruited from the judicial branch of the Indian Civil Service, the remaining places being available for the appointment of Indian lawyers. Trial by jury is the rule in original criminal cases before the High Courts, but juries are never employed in civil suits in India. For other parts of India High Courts have been formed under other names, the chief

The indigenous law of India is personal and divisible with reference to the two great classes of the population, Hindu and Mohammedan. Both systems claim divine origin and are inextricably interwoven with religion, and each exists in combination with a law based on custom. At first the tendency of the English and on the establishment of the Supreme Court at Calcutta in 1773 and the advent of English lawyers as judges, they proceeded to apply it to Europeans and Indians alike. This error was rectified by the Declaratory Act of 1780, by which Parliament declared that as against a Hindu the Hindu law and usage, and as against a Mohammedan the laws and customs of Islam should be applied. The rules of the Shastras and the Koran have been in some cases altered and relaxed. Instances can be found in the Bengal Sati Regulation Act of 1829, the Indian Slavery Act, 1843, the Caste Disabilities Removal Act of 1850, the Hindu Widows' Remarriage Act, 1856, and other Acts and Codes. To quote the Imperial Gazetteer, "A certain number of the older English statutes and the English common law are to a limited extent still in force in the Presidency Towns as applicable to Europeans, while much of the old Hindu and Mohammedan law is everywhere personal to their native fellow subjects, but apart from these, and from the customary law, which is as far as possible recognised by the Courts, the law of British India is the creation of statutory enactments made for it either at Westminster or by the authorities in India to whom the necessary law-giving functions have from time to time been delegated."

Codification

Before the transfer of India to the Crown the law was in a state of great confusion. Sir Henry Cunningham described it as "hopelessly unwieldy, entangled and confusing." The first steps toward general codification were taken in 1833, when a Commission was appointed, of which Lord Macaulay was the moving spirit, to prepare a penal code. Twenty-two years elapsed before it became law, during which period it underwent revision from his successors in the Law Membership, and especially by Sir Barnes Peacock, the last Chief Justice of the Supreme Court of Calcutta. The Penal Code, which became law in 1860, was followed in 1861 by a Code of Criminal Procedure. Substantially the whole criminal law of British India is contained in these two Codes. One of the most eminent lawyers who ever came to India, Sir James Stephen, said "The Indian penal code may be described as the criminal law of England freed from all technicalities and superfluities, systematically arranged and modelled in some few particulars (they are surprisingly few) to suit the circumstances of British India. It is practically impossible to misunderstand the code." The rules of Civil Procedure have been embodied in the Code of Civil Procedure. The Indian Penal Code has from time to time been amended. The Code of Civil Procedure was remodelled in 1908 and the Code of Criminal Procedure in 1933. These Codes are now in force

difference being that they derive their authority from the Government of India, not from Parliament. In the Punjab and Burma there are three Courts, with three or more judges, in the other provinces the chief appellate authority is an officer called the Judicial Commissioner. In the Sudder Court and has two colleagues.

The High Courts are the Courts of appeal from the superior courts in the districts, criminal and civil, and their decisions are final. They are in Council and an appeal lies to His Majesty in Council and is heard by the Judicial Committee of the Privy Council in England. The High Courts exercise supervision over all the subordinate courts. Returns are regularly sent to them at short intervals and the High Courts are able, by examining the returns, by (including) not proceedings, and by calling for explanation as well as from the cases that come before them in appeal to keep themselves to some extent acquainted with the manner in which the courts generally are discharging their duties.

Lower Courts

The Code of Criminal Procedure provides for the constitution of inferior criminal courts divided into sessions and courts of magistrates. Every province, outside the Presidency towns, is divided into sessions divisions, consisting of one or more districts, and every sessions division has a court of session and a sessions judge, with assistance if need be. The sessions divisions take the place of the English Assizes, and are competent to try all accused persons duly committed, and to inflict any punishment authorised by law, but sentences of death are subject to confirmation by the highest court of criminal appeal in the province. Magistrates' courts are of three classes with descending powers. Provision is made and largely utilised in the towns, for the appointment of honorary magistrates, in the Presidency towns Presidency magistrates, deal with magisterial cases and benches of Justices of the Peace or honorary magistrates dispose of the less important cases.

That before courts of session are, either with assessors or juries. Assessors assist, but do not bind the judge by their opinions, on juries the opinion of the majority prevails. It is accepted by the presiding judge. The Indian law allows considerable latitude of appeal. The prerogative of mercy is exercised by the Government General-in-Council and the Local Government concerned without prejudice to the superior power of the Crown.

The constitution and jurisdiction of the interior civil courts varies. Broadly speaking, one district and sessions judge is appointed for each district as District Judge he presides in its principal civil court of original jurisdiction, his functions as Sessions Judge have been described. For these posts members of the Indian Civil Service are mainly selected though some appointments are made from the Provincial Service. Next come the Subordinate Judges and Justices, the extent of whose original jurisdiction varies in different parts of India. The civil courts, below the grade of District

Judges, are almost invariably presided over by Indians. There are in addition a number of Courts of Small Causes, with jurisdiction to try money suits up to Rs 500. In the Presidency towns, where the Chartered High Courts have original jurisdiction, small Cause Courts dispose of money suits up to Rs 2,000. As in Calcutta, Bombay and Madras have jurisdiction in the Presidency towns. In the municipal similar powers were conferred on the District Courts by the Insolvency Act of 1906.

Legal Practitioners

Legal practitioners in India are divided into Barristers-at-law, Advocates of the High Court, and Attorneys (Solicitors) of High Courts, and Pleaders. Pleaders are admitted by each High Court to practise in it and its subordinate courts, and they alone are admitted to practise on the original side or some of the chartered side of the chartered High Courts and in the Courts subordinate to the High Courts. Attorneys are required to qualify before admission to practise in much the same way as in England. The rule that a solicitor must instruct counsel prevails only on the original side of certain of the High Courts. Pleaders practise in the subordinate courts in accordance with rules framed by the High Courts.

Organisation of the Bar

At Calcutta, Madras and Bombay there is a Bar Committee presided over, *ex officio*, by the Advocate-General. This body is elected by, and its functions are to watch the interests, and its members are to regulate its etiquette. At Allahabad, Lahore, Nagpur, and Bangalore a similar Bar Committee exists, but the electorates is extended to include the village or village pleaders, and the president is elected the most advanced member of the Bar or the Government Advocate. In the larger Districts and sessions Courts, an organisation representing the Bar is usually to be found, and in the subordinate Courts, including the Revenue Court, similar machinery is generally in use. Pending an opportunity of detailed inquiries in India, these general descriptions must suffice.

Composition of the Bar

A considerable change is occurring in the composition of the Indian Bar. The following extract from an important article in the *Times* (May 25, 1914) indicates the character and incidence of this development. During the last forty years, a striking change has taken place in the professional class. The bulk of Indian lawyers has largely passed from British to native hands, while at the same time, the profession has grown to an enormous extent. One typical illustration may be quoted. At present to the Bombay High Court in 1914

Law Reports

The Indian Law Reports are published in four series—Calcutta, Madras, Bombay, and Allahabad, under the authority of the Governor-General in Council. They contain cases determined by the High Court and by the Judicial Committee on appeal from the particular High Court. These appeals raise questions of very great importance, and the Council or Law Reporting for England and Wales show their appreciation by printing the Indian Appeals in a separate volume, and have also compiled a digest of Indian Appeals covering the period 1874-1898. The other Provinces and States either or the Judiciary or the State

Legislative Power

The supreme power of Parliament to legislate for the whole of India cannot be questioned. In practice, however, this power is little used, there being a majority of officials on the Imperial Legislative Council—a majority deliberately reserved in the India Councils Act of 1909—the Secretary of State is able to impose his will on the Government of India and to secure the passage of any measure he may frame, regardless of the opinion of the Indian authorities. Legislative Councils have been established both for the whole of India and for the principal provinces. Their constitution and functions are fully described in detailing the powers of the Imperial and Provincial Councils (q v). To meet emergencies the Governor-General is vested with the power of issuing ordinances, having the same force as Acts of the Legislature, but they can remain in force for only six months. The power is very little used. The Governor-General-in-Council is also empowered to make regulations, having all the cogency of Acts, for the more backward parts of the country, the object being to bar the operation of the general law and permit the application of certain enactments only

were 23 solicitors, of whom 10 were Indian and 7 were English, and 24 advocates, of whom 7 were Indian and 17 English. In 1911, attached to the same High Court, there were 150 solicitors, of whom more than 130 were Indian and the remainder English, and 250 advocates, of whom 16 only were English and the remainder Indian."

Law Officers

The Government of India has its own law colleague in the Legal Member of Council. All Government measures are drafted in this department. Outside the Council the principal law officer of the Government of India is the Advocate-General of Bengal, who is appointed by the Crown, is the leader of the local Bar, and is always nominated a member of the Provincial Legislative Council. In Calcutta he is assisted by the Standing Counsel and the Government Solicitor. There are Advocate-General and Government Solicitors for Bombay and Madras, and in Bombay there is attached to the Secretariat a Legal Member and an Assistant Legal Member, drawn from the Judicial Branch of the Indian Civil Service. The Government of Bengal consults the Bengal Advocate-General, the Standing Counsel and the Government Solicitor, and has besides a Legal Member (a Civil Servant) and a Deputy Legal Member (a practicing barrister), the United Provinces are equipped with a civilian Legal Member and professional lawyers as Government Advocate and Assistant Government Advocate, the Punjab has a Legal Member, Government Advocate and a Junior Government Advocate, and Burma a Government Advocate, besides a Secretary to the Local Legislative Council. Sheriffs are attached to the High Courts of Calcutta, Madras and Bombay. They are appointed by Government, selected from non-officials of standing, the detailed work being done by deputy sheriffs, who are officers of the Court.

Bengal Judicial Department

Chief Justice
Puisne Judge

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

Ditto

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Ditto

Ditto

Ditto

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Ditto

Sanderson Sir Lancelot
Lennon, The Hon'ble Mr William, 105
Woodroffe, The Hon'ble Mr John George, M.A., Barr-at-Law
Mukherji, The Hon'ble Sir Ashutosh, Kt., C.S.I., M.A., D.L.
Mickardson, The Hon'ble Mr Thomas William, 105,
Barr-at-Law
Holmwood, The Hon'ble Mr Herbert, 105
Chitty, The Hon'ble Mr Charles William, Barr-at-Law
Fletcher, The Hon'ble Mr Ernest Edward, Barr-at-Law
Shartnuddin, The Hon'ble Mr Sayid, Barr-at-Law
Coxe, The Hon'ble Mr Henry Keyneel Hould, 105
Chatterji, The Hon'ble Mr Digamber, M.A., B.L.
Chatterji, The Hon'ble Mr Nallai Ranjan, M.A., B.L.
Chauhan, The Hon'ble Mr Asutosh, Barr-at-Law
Imam, The Hon'ble Mr Sayid Hassan, Barr-at-Law
Beachcroft, The Hon'ble Mr Charles Porten, 105
Mulluck, The Hon'ble Mr Basanta Kumar, 105
Chapman, The Hon'ble Mr William Ewart, Barr-at-Law
Greaves, The Hon'ble Mr Edmund Pelly, 105
Walmesley, The Hon'ble Mr Hugh, 105

(Temporary, Additional),
Ditto
Ditto
Ditto
Ditto

Bengal Judicial Department—contd

| | |
|--|--|
| Advocate-General | Karmick, The Hon'ble Mr George Harry Blait, K O, |
| Standing Counsel | Mitra, The Hon'ble Mr Bindu Chandan, Bar at-Law |
| Government Solicitor | Kelvin, The Hon'ble Mr Charles Henry |
| Superintendent and Remembrancer of Legal Affairs | Kewbould, The Hon'ble Mr B B |
| Deputy Superintendent and Remembrancer of Legal Affairs | Orr, John William, Bar at-Law |
| Registrar, Keeper of Records, Taxing Officer, Accountant-General, and Sear, etc, Original Jurisdiction | Kennedy, Maurice |
| Deputy Registrar, Temporary Registrar in Insolvency | Mitch, James Herbert |
| Master and Official Referee | Stuart Mohan Chatterji, Bar at-Law |
| Assistant Registrar (Offg Dy Regstr) | Hyper, George |
| Clerk of the Crown for Criminal Sessions. | Bonnard, William Augustus, Bar at-Law |
| Secretary to the Chief Justice and Head Clerk, Decree Department (sub <i>pro tem</i>) | Hem Chandra Mitra |
| Registrar and Taxing Officer, Appellate Jurisdiction | Vitch, Harold Masyn, B A, I C S |
| Assistant Registrar | Counsell, Frank Hartman |
| Official Receiver, sub <i>pro tem</i> | Gree, Charles Edward, Bar at-Law |
| Coroner of Calcutta | Honnigley, K K Shelly, Bar at Law |
| Offg Editor of Law Reports | Dobbin, F K, Bar at-Law |
| Deputy Registrar | Walt, Thomas John |

Bombay Judicial Department

| | |
|---|---|
| Chief Justice | Scott, The Hon'ble Sir Basil, Kt, M A, Bar at-Law |
| Puisne Judge | Shah, The Hon'ble Mr Talubhai Asharam, M.A., LL.B |
| Ditto | Batchelor, The Hon'ble Sir Stanley Lockhart, Kt, B A, I C S |
| Ditto | Davay, The Hon'ble Sir Dinsha Dhanjibhai, Kt, Bar at-Law |
| Ditto | Hammam, The Hon'ble Mr Frank Clement Olney, I C S |
| Ditto | McLeod, The Hon'ble Mr Norman Cranston, B A, Bar at-Law |
| Ditto | Jarvis, M R, The Hon'ble Mr French, George Douglas |
| Advocate General, sub <i>pro tem</i> | Nasim, Joseph, M A, LL B, Bar at-Law, I C S |
| Remembrancer of Legal Affairs | Nicholson, Eustace Ferrers |
| Assistant Remembrancer of Legal Affairs | Slater, John Sanders, B A, Bar at-Law |
| Government Solicitor and Public Prosecutor | Abdell Muhammad Ali Kaziji, B A, LL B, Bar at-Law |
| Administrative-General and Official | Jijibhai Edaji Modi, Bar at-Law |
| Protionary, Testimentary and Admiralty Registrar | Vasant Rao Anand Rao Dabholkar |
| Master and Registrar in Equity and Local Investigations, and Taxing Officer | Alison, Frederick William, B A, I C S |
| Registrar Appellate Side | Nasirwanji Dhashaji Gharia, B A, LL B |
| Deputy Registrar and Sear, Appellate Side | |

Bombay Judicial Department—contd

| | |
|---|---|
| Coroner (On leave) | Lambert, E T |
| Acting Government Pleader | Annan, Dr W |
| GOVERNOR OF SIND | Sitaram Sunderrao Patkar, LL B |
| Judicial Commissioner | Pratt, Edward Milledar, ICS |
| Acting Additional Judicial Commissioner | Boyd, Charles Clifford |
| Additional Judicial Commissioner, Acting Puisne Judge | Hayward, Maurice Henry Weston, LL B, Bar at Law |
| Additional Judicial Commissioner | Crouch, Henry Weston, LL B, Bar at Law |

Madras Judicial Department

| | |
|--|--|
| Chief Justice | Wallis, The Hon'ble Sir John Edward Power, Kt |
| Puisne Judge | (1) Milledar, The Hon'ble Mr Francis Du Pre, ICS |
| Ditto | Spencer, The Hon'ble Mr Charles Gordon, ICS |
| Ditto | Lottor, The Hon'ble Mr Victor Murray Louks |
| Ditto | Abdur Rahim, The Hon'ble Mr A A, Bar-at-Law |
| Ditto | Phillips, The Hon'ble Mr W W |
| Ditto | Ythimasa Ayyangar, The Hon'ble Mr K |
| Ditto | Gadastya Ayyar, The Hon'ble Mr T, Diwan Bahadur |
| Ditto | Ayyang, The Hon'ble Mr William Bock, ICS |
| Temporary (Additional) | Lawwell, The Hon'ble Mr James Herbert, LL B Bar-at-Law |
| Ditto (Officiating) | Unmarasani Shastri, The Hon'ble Mr C V, Diwan Bahadur |
| Org Judge (Temporary (Additional)) | Seshagiri Ayyar, The Hon'ble Mr T V, B A, B L, Dewan Bahadur |
| Advocate-General | Corbet, Frederick Hugh Mackenzie, Bar-at-Law |
| Government Solicitor | David, William Ontario |
| Government Pleader and Public Prosecutor | Vapier, Charles F, Bar-at-Law |
| Crown Prosecutor | Adam, John, M A, Bar-at-Law |
| Law Reporter | Grant, P R, Bar-at-Law |
| Administrative-General and Official | Odgers, The Hon'ble Mr C E, M A, Bar-at-Law |
| Trustee | Mackay, Charles Gordon, K C, ICS |
| Registrar | The Hon'ble Shitla ul-Mulk Zynulabdin |
| Sheriff | |

Assam Judicial Department

| | |
|--|---------------------------|
| Judge and Superintendent and Receiver of Legal Affairs, Shillong | Graham, John Fuller |
| Judge, Assam Valley Districts, Gauhati | Jeffries, Francis Joseph |
| Officiating District and Sessions Judge, Sylhet and Cachar | Varad, Prasad Bakshi, M L |

Bihar and Orissa Judicial Department.

| | |
|---------------|--|
| Chief Justice | Sunderason, Sir Lancelot |
| Puisne Judge | Woodroffe, The Hon'ble Sir John George, Kt, M A, B C L |
| Ditto | Mukherji, The Hon'ble Sir Ashimosh, Kt, C S I, M A |
| Ditto | Holmes, The Hon'ble Mr Herbert, ICS |
| Ditto | Chatter, The Hon'ble Mr Earnest Edward, Bar-at-Law |
| Ditto | Chatter, The Hon'ble Mr Sayid, Bar-at-Law |
| Ditto | Chatter, The Hon'ble Mr Henry Mollard, ICS |
| Ditto | Chatter, The Hon'ble Mr Dignabur, M A, B L |

* Bihar and Orissa are to be separated from the Bengal Judicial Department in 1916 and to have their own High Court at Patna

Bihar and Orissa Judicial Department—contd.

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Burma Judicial Department.

| | |
|---|---|
| <p>Chief Judge, Chief Court, Lower Burma.</p> | <p>Judge</p> |
| <p>Judge (On leave)</p> | <p>Judge</p> |
| <p>Judge (On leave)</p> | <p>Judge (Officiating)</p> |
| <p>Judicial Commissioner, Upper Burma.</p> | <p>Government Advocate,</p> |
| <p>Official Assignee and Receiver, Rangoon</p> | <p>Government Prosecutor, Rangoon</p> |
| <p>Government Prosecutor, Moulmein</p> | <p>Registrar, Chief Court, Lower Burma</p> |
| <p>Registrar, Court of Judicial Commission-
er, Upper Burma</p> | <p>Private Arthur John, Barr at Law
From High Roberts, B A, F C S
Walter, Esq</p> |

Central Provinces, Judicial Department.

| | |
|--|---|
| Dr. Robinson, Sir H. V., M. A., LL. M., Barr at Law, | Judicial Commissioner |
| Batten, J. K. Esq. | First Additional Judicial Commissioner. |
| Stratton, H. J., LL. B., LL. D., Barr at Law | Second Additional Judicial Commissioner |
| Hoskisson, J. Esq. | Registrar |
| Franklin, R. Esq. | Deputy Registrar |

N-W Frontier Province, Judicial Department

| | |
|-----------------------|---------------------------|
| Judicial Commissioner | Barton, W P, C I E, I C S |
| Registrar | Muhammad Yakub, Muzi |

Punjab Judicial Department.

| | |
|-------------|--|
| Chief Judge | Johnstone, The Hon'ble Mr Donald Campbell, I C S |
| Judge | Rattigan, The Hon'ble Mr Henry Adolphus Byden, B A, Bar-at-Law |

| | |
|-------|---|
| Judge | Shah Din, The Hon'ble Mian Muhammad, Bar-at-Law |
| Judge | Smith, The Hon'ble Mr H Scott, I C S |

| | |
|-------------------------------------|---|
| Judge | Cherie, The Hon'ble Mr William, I C S |
| First Temporary Additional (Judge) | Shadi Lal, The Hon'ble Mr Rai Bahadur, Bar-at-Law |
| Second Temporary Additional (Judge) | Le Rossignol, The Hon Mr Walter Aubin, I C S |

| | |
|---------------------|--|
| Legal Remembrancer | Gracey, S W, B A, I C S |
| Government Advocate | Petman, Charles Bevan, B A, Bar-at-Law |
| Registrar | Campbell, Archibald, B A, I C S |

United Provinces, Judicial Department

| | |
|---------------|---|
| Chief Justice | Richards, The Hon'ble Sir Henry George, Kt, Bar-at-Law, K C |
| Puisne Judge | Knox, The Hon'ble Sir George Edward, Kt, L D, I C S |

| | |
|-------|---|
| Ditto | Banarji, The Hon'ble Sir Pramada Charan, Kt, B A, B L |
| Ditto | Riggall, The Hon'ble Mr Theodore Caro, I C S |

| | |
|-------|--|
| Ditto | Tudball, The Hon'ble Mr William, I C S |
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| | |
|-------|---|
| Ditto | Chandler, The Hon'ble Mr Edward Maynard Des
Champs, Bar-at-Law |
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| Ditto | Rahq, The Hon'ble Mr Muhammad, Bar-at-Law |
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|-----------|------------------------------|
| Registrar | Murray, George Ramsay, I C S |
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|---------------------|---------------------------------------|
| Legal Remembrancer | Ashworth, The Hon'ble Mr E H, I C S |
| Government Advocate | Ryves, Alfred Edward, B A, Bar-at-Law |

| | |
|---|----------------------------------|
| Law Reporter and Secretary, Legislative Council | Porter, Wilfred King, Bar-at-Law |
| Government Pleader | Lallu Mohan Banarji |

COURT OF JUDICIAL COMMISSIONERS OF OUDH—LUCKNOW

| | |
|---|---------------------------|
| Judicial Commissioner | Linday, Bevilamin, I C S |
| First Additional Judicial Commissioner | Stuart, Louis, I C S |
| Second Additional Judicial Commissioner | Rai Kanhaiya Lal, Bahadur |
| Temporary Registrar | Cordaux, C H, Bar-at-Law |
| Government Pleader | Nagendra Nath Ghosal |

THE INDIAN POLICE.

The Indian Government employ 192,701 men in the ranks of the Indian Police, who are controlled by 749 Gasetted European Officers in large cities, the Force is concentrated and under direct European control, in the most important towns. The smallest unit for administrative purposes is the Outpost which generally consists of 3 or 4 Constables under the control of a Head Constable. Outpost Police are maintained to patrol roads and villages and to report all matters of local interest to their superior, the Sub-Inspector. They have no power to investigate offences and are a deterrent to the criminal class. The country was in a disturbed state and small bodies of Police were required to keep open communications and afford protection against the raids of dacoits. It is an open question whether they are now of much use. Each Outpost is under a Police Station which is controlled by an officer known as a Sub-Inspector.

| Average number of
Regular Civil
Police per 10,000
of Population | Average area per
Police Station | Square miles | Excluding the towns of Calcutta, Bombay and Rangoon
Railway police, but not Military police |
|--|------------------------------------|--------------|--|
| 14 | 358 | 138 | Bengal * |
| 34 | 127 | 96 | United Provinces |
| 76 | 210 | 179 | Punjab |
| 96 | 179 | 273 | North West Frontier Province |
| 183 | 273 | 500 | Central Provinces and Berar |
| 171 | 106 | 290 | Burma * |
| 78 | 129 | | Madras |
| 129 | | | Bombay * |

Organisation of Police

The Police Station Officer (the Sub-Inspector) is responsible for the investigation of all cognisable crimes, that is to say, all offences in which the Police can arrest without a warrant from a Magistrate, which occur within his jurisdiction; he is also held responsible for the maintenance of the public peace and the prevention of crime. From the point of view of the Indian River, he is the most important Police Officer in the District and may rightly be considered the backbone of the Force.

Superior to the Sub-Inspector is the Inspector who holds charge of a circle containing 4 or 5 Police Stations. His duties are chiefly those of supervision and inspection. He does not ordinarily interfere in the investigation of crime unless the conduct of his subordinates renders this necessary.

The Inspector is usually a selected and experienced Sub-Inspector, Isth District commandant, and in the case of large selected European Officers of the rank and grade, which is the Criminal Investigation Department, recruited from the District Superintendent of Police, a European gazetted Officer by a District Superintendent of Police, who is responsible to the District Magistrate (Collector or Deputy Commissioner) for the detection and prevention of crime and for the maintenance of the public peace, and, to his Deputy Inspector-General and Inspector-General, for the internal administration of his Force. Eight or ten Districts form a Range administered by a Deputy Inspector-General, an officer selected from the ranks of the Superintendents at the head of the Police of each Province is the Inspector-General who is responsible to the Local Government for the administration of the Provincial Police.

Separate but recruited from the District Superintendent of Police, is given to one Division—Districts, is divided into 2 Sub-divisions—one

The Deputy Superintendent, a new class of officer, instituted on the recommendation of the Commission, is an Indian gazetted officer and is the native Assistant to the District Superintendent of Police. He is either selected by special promotion from the ranks of the Inspectors or is nominated direct, after a course of study at the Central Police School.

Prior to 1893, the gazetted ranks of the Force were filled either by nomination or by regimental officers seconded from the Army for certain periods. In 1893, this system was abandoned and Assistant Superintendents were recruited by examination in London. On arrival in India they were placed on probation until they had passed their examinations in the vernacular, in law, and in riding and drill. The establishment of Police Training schools in 1900 has done much to improve the training of the Police Provisioner, and selection by examination has given Government a better educated officer but open competition does not reveal the best administrators and should be tempered, as in the Navy by selection.

Pay—The monthly salaries drawn by each grade of Police Officer are as follows —

| | | |
|---|--------------|---|
| " | 15 to 20 | A Head Constable draws |
| " | 30 to 100 | A Sub-Inspector from |
| " | 150 to 250 | An Inspector from |
| " | 250 to 500 | Deputy Superintendents from |
| " | 300 to 500 | Assistants from |
| " | 700 to 1,500 | District Superintendents of Police from |

Deputy Inspectors General Rs. 1,500 to 1,500
Inspectors General Rs. 2,000 to 3,600

[illegible]

Statistics of Police Work

The undesirability of attaching undue importance to statistical results as a test of the Indian Police Commission, who are impressed that the evils likely to result from the prevalence among subordinate officers of an impression that the advancement of any officer would depend upon his being able to show a high ratio of convictions, both to cases and to persons arrested, and a low ratio of crime. The objection applies more particularly to the use of statistics for small areas, but they cannot properly be used as a basis of comparison even for larger areas, without taking into account the differences in the conditions under which the police work, and, it may be added, they can at the best indicate only very imperfectly the degree of success with which the police carry out that important branch of their duties, which consists in the prevention of crime. These considerations have been emphasized in recent orders of the Government of India. Subject to these observations, the figures below may be given as some indication of the volume of work falling upon the police, and of the wide differences between the conditions and the statistical results in different provinces —

| Persons whose cases were disposed of | Administrations | | | | Persons remaining under trial at the end of the year |
|--------------------------------------|-----------------------------|-------------------------------|-------------------------|-----------|--|
| | Number of Offences reported | Number of Persons under Trial | Discharged or Acquitted | Convicted | Committed or Referred |
| Persons | Died | Escaped | Under Trial | Remained | at the end of the year |
| | | | | | |

| | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------|-----------|-----------|---------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|-------|
| Bengal | 33,309 | 298,143 | 93,576 | 192,246 | 2,565 | 140 | 9,006 | 4,411 | 5,920 | 14,253 | 871 | 7,959 | 3,327 | 2,185 | 625 | 240 | 14,318 | 10,862 | 1,190 |
| Bihar and Orissa | 112,917 | 107,650 | 50,609 | 50,266 | 1,615 | 97 | 4,411 | 4,411 | 200 | 241 | 17 | 2,339 | 3,327 | 35 | 84 | 7 | 14,318 | 10,862 | 1,190 |
| United Provinces | 222,817 | 316,365 | 187,009 | 118,444 | 4,791 | 200 | 5,920 | 14,253 | 241 | 17 | 871 | 7,959 | 3,327 | 35 | 84 | 7 | 14,318 | 10,862 | 1,190 |
| Punjab (including Delhi) | 231,253 | 310,121 | 218,534 | 75,342 | 1,751 | 241 | 14,253 | 14,253 | 241 | 17 | 871 | 7,959 | 3,327 | 35 | 84 | 7 | 14,318 | 10,862 | 1,190 |
| North-West Frontier Province | 25,593 | 38,678 | 22,807 | 14,498 | 485 | 17 | 871 | 7,959 | 3,327 | 2,185 | 625 | 240 | 14,318 | 10,862 | 1,190 | 3,327 | 2,185 | 625 | 240 |
| Burmah | 108,440 | 188,941 | 70,416 | 106,083 | 2,144 | 2,339 | 7,959 | 3,327 | 2,185 | 625 | 240 | 14,318 | 10,862 | 1,190 | 3,327 | 2,185 | 625 | 240 | 1,190 |
| Central Provinces and Berar | 59,820 | 56,880 | 32,193 | 19,810 | 1,499 | 51 | 3,327 | 2,185 | 625 | 240 | 14,318 | 10,862 | 1,190 | 3,327 | 2,185 | 625 | 240 | 1,190 | 1,190 |
| Assam | 40,862 | 33,754 | 16,268 | 14,784 | 484 | 35 | 2,185 | 625 | 240 | 14,318 | 10,862 | 1,190 | 3,327 | 2,185 | 625 | 240 | 1,190 | 1,190 | 1,190 |
| Nagpur, Western | 10,698 | 12,969 | 4,292 | 7,968 | 84 | 625 | 240 | 14,318 | 10,862 | 1,190 | 3,327 | 2,185 | 625 | 240 | 1,190 | 3,327 | 2,185 | 625 | 240 |
| Coorg | 2,489 | 3,037 | 1,741 | 1,038 | 11 | 7 | 240 | 14,318 | 10,862 | 1,190 | 3,327 | 2,185 | 625 | 240 | 1,190 | 3,327 | 2,185 | 625 | 240 |
| Madras | 53,167 | 502,155 | 236,965 | 246,553 | 4,178 | 141 | 14,318 | 10,862 | 1,190 | 3,327 | 2,185 | 625 | 240 | 1,190 | 3,327 | 2,185 | 625 | 240 | 1,190 |
| Bombay | 172,103 | 253,315 | 112,842 | 126,507 | 2,127 | 828 | 10,862 | 1,190 | 3,327 | 2,185 | 625 | 240 | 1,190 | 3,327 | 2,185 | 625 | 240 | 1,190 | 1,190 |
| British India | 5,786 | 10,796 | 6,405 | 3,068 | 103 | 1,190 | 3,327 | 2,185 | 625 | 240 | 1,190 | 3,327 | 2,185 | 625 | 240 | 1,190 | 3,327 | 2,185 | 625 |
| TOTAL, 1912 | 1,659,254 | 2,132,813 | 1,053,657 | 977,267 | 21,650 | 4,313 | 75,765 | 75,765 | 4,313 | 21,650 | 4,313 | 75,765 | 75,765 | 4,313 | 21,650 | 4,313 | 75,765 | 75,765 | 4,313 |
| 1911 | 1,502,993 | 1,960,679 | 966,783 | 897,786 | 21,173 | 3,906 | 70,862 | 64,077 | 3,439 | 21,173 | 3,906 | 70,862 | 64,077 | 3,439 | 21,173 | 3,906 | 70,862 | 64,077 | 3,439 |
| 1910 | 1,447,752 | 1,884,951 | 922,379 | 872,298 | 21,029 | 3,439 | 64,077 | 58,496 | 3,025 | 21,029 | 3,439 | 64,077 | 58,496 | 3,025 | 21,029 | 3,439 | 64,077 | 58,496 | 3,025 |
| 1909 | 1,421,350 | 1,856,219 | 914,500 | 854,658 | 32,174 | 3,439 | 61,502 | 55,496 | 3,025 | 32,174 | 3,439 | 61,502 | 55,496 | 3,025 | 32,174 | 3,439 | 61,502 | 55,496 | 3,025 |
| 1908 | 1,412,817 | 1,844,207 | 897,462 | 860,063 | 24,335 | 3,025 | 55,496 | 50,223 | 3,011 | 24,335 | 3,025 | 55,496 | 50,223 | 3,011 | 24,335 | 3,025 | 55,496 | 50,223 | 3,011 |
| 1907 | 1,411,633 | 1,816,827 | 880,706 | 851,097 | 21,296 | 3,011 | 54,041 | 48,525 | 3,011 | 21,296 | 3,011 | 54,041 | 48,525 | 3,011 | 21,296 | 3,011 | 54,041 | 48,525 | 3,011 |
| 1906 | 1,404,777 | 1,805,707 | 864,493 | 860,480 | 22,770 | 3,011 | 53,041 | 47,531 | 3,011 | 22,770 | 3,011 | 53,041 | 47,531 | 3,011 | 22,770 | 3,011 | 53,041 | 47,531 | 3,011 |
| 1905 | 1,385,344 | 1,767,134 | 823,185 | 867,398 | 21,293 | 6,429 | 53,525 | 47,531 | 6,429 | 21,293 | 6,429 | 53,525 | 47,531 | 6,429 | 21,293 | 6,429 | 53,525 | 47,531 | 6,429 |
| 1904 | 1,370,007 | 1,758,411 | 830,010 | 843,369 | 20,144 | 7,346 | 57,531 | 51,531 | 7,346 | 20,144 | 7,346 | 57,531 | 51,531 | 7,346 | 20,144 | 7,346 | 57,531 | 51,531 | 7,346 |
| 1903 | 1,320,652 | 1,700,038 | 781,347 | 827,810 | 19,840 | 5,356 | 67,885 | 61,885 | 5,356 | 19,840 | 5,356 | 67,885 | 61,885 | 5,356 | 19,840 | 5,356 | 67,885 | 61,885 | 5,356 |

* Including some cuts of cattle theft

| | | | | | | | | | | | | | |
|----------------------|--------|-------|-------|-------|--------|-------|------|--------|-------|---------|--------|--------|--------|
| Baruch | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Calcutta | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Suburb | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| United Provinces | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Punjab | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Deccan | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| West Frontier Pro- | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Vindhya | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Burma | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Kancon | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Central Province and | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Berari | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Assam | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Coorg | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Madras | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Bombay | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| Bombay Town & Island | 1,711 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| TOTAL, 1912 | 12,414 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| 1911 | 11,670 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| 1910 | 11,700 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| 1909 | 11,919 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| 1908 | 12,411 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| 1907 | 12,181 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| 1906 | 12,380 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| 1905 | 12,313 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| 1904 | 14,839 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| 1903 | 15,528 | 4,430 | 1,008 | 5,007 | 14,763 | 2,312 | 11 | 21,211 | 7,171 | 174,021 | 28,206 | 19,184 | 20,175 |
| TOTALS | 1911 | 1910 | 1909 | 1908 | 1907 | 1906 | 1905 | 1904 | 1903 | 1902 | 1901 | 1900 | 1899 |

JAILS.

Jail administration in India is regulated generally by the Prisons Act of 1894, and by rules issued under it by the Government of India and the local governments. The punishment authorised by the Indian Penal Code for offenders includes rigorous imprisonment (which may include short periods of solitary confinement) and simple imprisonment. Accommodation has also to be provided in the jails for civil and under-trial prisoners.

The origin of all improvements in India in recent years was the Jail Commission of 1889. The report of the Commission, which consisted of only two members, both officials, serving under the Government of India, is very lengthy, and reviews the whole question of jail organisation and administration in the minutest detail. In most matters the Commission's recommendations have been accepted and adopted by Local Governments, but in various matters, mainly of a minor character, their proposals have either been rejected or modified to local conditions, abandoned as unsuitable after careful experiment or accepted in principle but postponed for the present as impossible.

The most important of all the recommendations of the Commission, the one that might in fact be described as the corner stone of their report, is that there should be in each Presidency, large central jails for convicts sentenced to more than one year's imprisonment, secondary, district jails at the head-quarters of counties, and, thirdly, subsidiary jails and lock-ups "for under-trial prisoners and convicts sentenced to short terms of imprisonment." The jail department in each province is under the control of an Inspector-General, who is generally an officer of the Indian Medical Service with jail experience, and the Superintendent of certain jails are usually recruited from the same service. The district jail is under the charge of the civil surgeon, and is frequently inspected by the district magistrate. The staff and the executive staff consists of medical officers, jailers and warders, and convict petty officers are employed in all central and district jails, being a strong inducement to good behaviour. A Press Note issued by the Bombay Government in October 1916, says—"The cadre and appointments of all ranks from Warder to Superintendent have been repeatedly revised and altered in recent years. But the Department is not at all restrictive in its lower grades. The two weak spots in the jail administration at the moment are the insubordination of Central Prisoners and the difficulty of obtaining good and suitable warders."

Employment of Prisoners—The work on which convicts are employed is mostly carried on within the jail walls, but extra-mural employment on a large scale is sometimes allowed, as, for example, when a large number of convicts are employed in excavating the Jhelum Canal in the Punjab. Within the walls prisoners are employed on jail service and repairs, and in workshops. The main principle laid down with regard to jail manufactures is that the work must be penal and industrial. The industries are on a large scale, and industrial employment being condemned, while care is taken that the jail shall not compete with local traders. As far as possible industries are adapted to the requirements of the consuming public departments, and printing, tent-making, and the manufacture of clothing are among the commonest employments. Schooling is confined to juveniles, but literary instruction is unsuitable for the class of persons who fill an Indian jail.

The conduct of convicts in jail is generally good, and the number of desperate characters among them is small. Failure to perform the allotted task is by far the most common offence in a large majority of cases the punishment inflicted is one of those classed as "minor." Among the "major" punishments fetters take the first place. Corporal punishment is inflicted in relatively few cases and the number is steadily falling. Punishments were revised as the result of the Commission of 1889. Two notable punishments then abolished were shaving the heads of female prisoners and the stocks. The latter, which was apparently much practised in Bombay, was described by the Commission as inflicting exquisite torture. Punishments are now scheduled and graded into major and minor. The most difficult of all problems is the internal maintenance of order among the prisoners, for which purpose paid warders and convict warders are employed. With this is bound up the question of a special class of well-behaved prisoners which was tried from 1905 onwards in the Thana Jail.

Juvenile Prisoners—As regards "youthful offenders," i.e., those below the age of 15—the law provides alternatives to imprisonment, and it is strictly enjoined that boys shall not be sent to jail when they can be dealt with otherwise. The alternatives are detention in a reformatory school for a period of from three to seven years, but not beyond the age of 18, discharge on probation, or delivery to the parent or guardian on the latter exceeding a prescribed age, and nomination of the juvenile to a place for adolescents (other than youthful habituals) who are over 15, and therefore ineligible for admission to the reformatory school. The Local Governments to consider schemes for going beyond this by treating young adults on the lines followed at Dorset, and considerable progress has been made in this direction. In 1903, a special class for selected juveniles and young adults was established at the Dhamar

The daily average number of prisoners, which had steadily decreased since 1908, rose slightly in 1913 to nearly the figure of 1911. The fall in 1912 was, however, largely attributable to the release of convicts and civil prisoners on the occasion of the Delhi Durbar. The increase in 1913 was distributed among all provinces except the United Provinces of Agra and Oudh and Coorg, in which the figures continued to show decreases.

More than one-half of the total number of convicts received in jails during the year came from the classes engaged in agriculture and cattle tending, over 132,000 out of 160,000 are returned as illiterate.

The percentage of previously convicted prisoners was 17.29 as against 16.45 in 1912, while the number of youthful offenders fell from 726 to 626. The following table shows the nature and length of sentences of convicts admitted to jails in 1912 and 1913 —

| Nature and Length of Sentence | | 1913 | 1912 |
|--|---|--------|--------|
| Not exceeding one month | | | |
| Above one month and not exceeding six months | | | |
| “ six months | “ | 29,245 | 27,683 |
| “ one year | “ | 21,384 | 20,551 |
| “ five years | “ | 2,280 | 2,336 |
| “ exceeding ten years | “ | 312 | 235 |
| Transportation beyond seas — | | | |
| (a) for life | | | |
| (b) for a term | | | |
| Sentenced to death | | | |
| | | 43,700 | 44,080 |
| | | 61,580 | 62,020 |
| | | 29,245 | 27,683 |
| | | 21,384 | 20,551 |
| | | 2,280 | 2,336 |
| | | 312 | 235 |
| | | 1,148 | 1,050 |
| | | 759 | 724 |
| | | 870 | 761 |

rather than by a police officer whose professional zeal might weigh hardly on the innocent suspect, and whose *esprit de corps* might shield a corrupt or unscrupulous subordinate from justice.

(3) That Executive Officers in India, being responsible for a large amount of miscellaneous business, have not time at their disposal to discharge their judicial functions.

By this it is presumably meant that the Executive Officer is at present overworked. This is quite possible, but the remedy would appear to be rather in an increase of staff than in a redistribution of functions, which in itself could not remedy the defect.

(4) That, being keenly interested in carrying out particular measures, they are apt to be brought more or less into conflict with individuals, and therefore that it is inexpedient that they should also be invested with judicial powers.

It is implied here that the District Officer may use his judicial powers to enforce the executive measures in which he is interested. It is not unknown to a District Magistrate to issue orders to subordinates enforcing severe sentences in particular classes of cases and this may have reference to a particular executive policy (e.g., such orders might be issued with regard to smuggling cases in a District where the illicit traffic in cocaine was rife). But it by no means follows that any injustices will result from such a line of action. Moreover, if this kind of "interference" by the District Magistrate were stopped, the only alternative left to Government, in cases where they wished specially to represent a particular type of crime, would be to amend the criminal codes by raising the minimum penalty for the offence, thereby depriving Magistrates of all discretion in the matter.

(5) That under the existing system District Magistrates do, in fact, neglect judicial functions. It is not at first sight obvious how this can be urged as an objection to the fact that they do both types of work. It is true, as already stated, that the District Magistrate tries very few original cases, but it by no means follows that what judicial work he does, is done negligently. That the District Magistrate is overworked is a fact which is not to be denied. It is not at all surprising that all revenue matters should be decided by the operation of the machinery and complicated machinery of the various Courts. The fact that the population, where quarters of the population are concentrated, is such as to require a high degree of supervision, that the cost of the objection is not too great, and that the District Magistrate is not overworked, is a fact which is not to be denied. The separation of the two functions is a desirable one, and the District Magistrate is not overworked. The separation of the two functions is a desirable one, and the District Magistrate is not overworked.

These then are the main objections which have been raised against the existing system. It may well be asked why, if these objections are grounded, has there been such unanimity in the opinions expressed by reformers. There are perhaps two reasons which are mainly responsible. Firstly, it is beyond question that the proposed separation would everywhere weaken the Collector's position, and thereby that of the British Raj, and secondly, those who desire the separation belong almost without exception to the class from which lawyers are most largely recruited. The separation would not merely provide an innumerable set of penal bills, holders of which would have to be recruited from among the lawyers, but an immense increase of litigation would also result. There is no doubt that over the greater part of India, the common people place a very real confidence in the Magistrate, and this confidence is largely based on the fact that the Magistrate exercises control over the Magistrate's control exercised by District Magistrates over their subordinates. Not is there any doubt that the common people would view with the most intense alarm any proposal which would render the Magistrate independent of this control.

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(2)

The first room Jacob David Baro

The following (Amendment) Act —

The first of these is the fact that the Government has not yet decided whether it will accept the offer of the United States to provide a loan of \$100 million to the Government of the Republic of China. The second is the fact that the Government has not yet decided whether it will accept the offer of the United States to provide a loan of \$100 million to the Government of the Republic of China. The third is the fact that the Government has not yet decided whether it will accept the offer of the United States to provide a loan of \$100 million to the Government of the Republic of China.

1. The Defence of India (Criminal Law Amendment) Act—The provisions of the Act

Let us go to the front during the con-
tinuance of the present war for a pe-
riod of six or eight years, until the
country has been completely recon-
structed, which will require at least
of the kind of the Reconstruction
period of the country.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1

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To the Honorable Members of the Senate,
I have the honor to acknowledge the receipt of your letter of the 10th inst., relative to the subject mentioned.

11. The following information is for your information:

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י' חשוון ה'תשנ"ב

The North West Frontier Constab-

1. מן המעורבות של הממשלה בניהול העניינים
2. מן המעורבות של הממשלה בניהול העניינים

Wm. W. L. & Co., Boston, Mass.

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1. Երբ ինքնաշարժը շարժվում է դեպի առաջ, ապա ինքնաշարժի շարժման արագությունը փոքրանում է:

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responsibility by the Political Officer re-

Officers appointed by him (s 8) The less heinous offences enumerated in s 9 are made punishable with imprisonment for a term which may extend to one year or with fine which may extend to three months; by section 10 sets out the minor military punishments, viz, reduction in rank and emoluments, fine to any amount not exceeding one month's pay, confinement to quarters for a term not exceeding one month, confinement in the quarter guard for not more than twenty-eight days, and removal from any office or distinction. The hard and responsible duties of the members of the force are set off by the general immunity from civil or criminal proceedings, by the plea that the "act was done by him under the authority of such warrant or order" (s 17)

14 The Enemy Trading Act—During the pendency of the war payment of money to hostile foreign subjects having been prohibited by Proclamation, this Act calls into being a public authority to whom such payments may be made. The Governor-General in Council is authorized to appoint a custodian of the enemy property (s 2) Any sum, by way of dividend, interest or share of profits payable to any enemy subject should be paid to the custodian (s 4) The custodian has the power to receive payments which do not fall within the Act (s 7) and has receipt constitutes a good discharge to the person making the payment (s 8) He is to hold the money so received, in accordance with the direction he may receive from the Governor-General in Council (s 9) No suit or other proceeding may be against the custodian in respect of any thing done by him in good faith under the Act (s 10) Government have also the power to extend the provisions of the Act to payments the making of which is prohibited by or under the Enemy Trading Proclamation (s 12) or to sum relating to forcibles (s 13)

15 The Inland Steam-Vessels (Amendment) Act—Under the provisions of s 29A in the Inland Steam-Vessels Act of 1884, municipalities or companies and service granted to Masters, Engineers, etc, of Inland Steam-Vessels had effect throughout British India. In 1912, the Government of Bengal pointed out that a knowledge of the River Hughli was essential for masters in charge of inland steam-vessels. This section is inserted by limiting the validity of the necessary knowledge granted elsewhere, to the holder of certificates granted elsewhere, (s 14) The degrees, diplomas, certificates and other academic distinctions granted by the Universities are to have the same recognition at the hands of Government as those granted by the existing Indian Universities (s 16) The formation and scope of Statutes and Regulations of the Universities are provided with minute detail in ss 17 and 18. The Governor-General in Council has extensive power to act in cases of emergency, viz, the removal of any member of the teaching staff, and the appointment of a certain examiner, and the making of the scale of remuneration of the staff (s 19) The University grows out of the present Hindu University Society which is now dissolved and all its property rights powers and privileges are to vest in the Dharm Hindu University (s 20)

16 The Benares Hindu University Act—The present Act is one of the most notable measures of legislation enacted by the Supreme Legislative Council for some time past. It establishes and incorporates a teaching and residential Hindu University at Benares. First of all it creates a corporation sole of the University by s 3. The portals of the University are "open to persons of all classes," but provision shall be made for religious instruction and examination in Hindu religion only, "this instruction is compulsory in the case of Hindus Special arrangements are to be made for the religious instruction of Jain or Sikh students (s 4) The constitution of the governing body of the University is well provided for. The Governor-General of India for the time being shall be the Lord Rector (s 5), the Lieutenant-Governor for the time being of the United Provinces or a member of the Council shall be the Visitor, who has the power to inspect the University and its colleges and to annul the proceedings of the University if they are found to be not in conformity with this Act, Statutes and Regulations (s 6) The authorities and officers of the University are named to be (1) The Chancellor, (2) The Pro-Chancellor, (3) The Vice-Chancellor, (4) The Pro-Vice-Chancellor, (5) The Court, (6) The Council, (7) The Senate, (8) The Syndicate, (9) The Faculties and their Deans, (10) The Registrar, and (11) The Treasurer (s 7) In administrative affairs of the University, the Court is the supreme governing body and has the power to review the acts of the Senate (s 9) The executive body of the Court is called the Council (s 10) The Senate is the academic body (s 11), of which the executive body is called the Syndicate (s 12) To meet the recurring charges, a permanent endowment of fifty lakhs of rupees is to be made and invested in authorized securities (s 14) The degrees, diplomas, certificates and other academic distinctions granted by the Universities are to have the same recognition at the hands of Government as those granted by the existing Indian Universities (s 16) The formation and scope of Statutes and Regulations of the Universities are provided with minute detail in ss 17 and 18. The Governor-General in Council has extensive power to act in cases of emergency, viz, the removal of any member of the teaching staff, and the appointment of a certain examiner, and the making of the scale of remuneration of the staff (s 19) The University grows out of the present Hindu University Society which is now dissolved and all its property rights powers and privileges are to vest in the Dharm Hindu University (s 20)

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and
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the country and a warm care for the Indian soldiers at the front, the mover went on to declare—"It is believed that Germany expected that India would support her in this war. If Germany harboured such a absurd belief it only shows how the West is often mistaken in its reading of the Indian character. It is all the more remarkable that this mistake should have been made by a nation which claims to have made a special study of ancient Indian literature. What is this war? Is it not a war between the moral forces of humanity and brute power? The object of the war is to establish the supremacy over all that is good and noble and virtuous in man." A few amendments to the verbiage of the resolution were suggested by the Commander-in-Chief and accepted, it was strongly supported by all the unofficial members of the Council, carried, and accepted by the Viceroy with an undertaking to convey it to His Majesty.

The Hon Raja Kishnupal Singh proposed a resolution dealing with the promotion of industries in India. This motion reflected a widespread desire throughout the country and it proved the general expectation of an industrial development which would make India a self-supporting country. There was a feeling that the certain hour had arrived through the absorption of Europe in war and the closing of the Indian market to Germany and Austria who were the principal exporters of manufactured goods. The resolution took the following form— "That this Council recommends that, in view of the cessation of imports from hostile countries, the Government be pleased to invite the opinions of the Local Governments and Administrations as to the desirability of promoting industrial enterprises by loans on the lines of advances." In supporting it the mover said that the only two countries which might possibly capture the Indian market were the United States and Japan. The present freedom from the commercial and industrial domination of Germany and Austria—Hungary was a temporary relief. Unless India filled the void caused by their elimination from the market, it would be small solace if their place was taken by some other country such as the United States or Japan. But the history of industrially progressive countries supported the view that the State might, with proper, reader assistance, aid to industries. The aid chiefly needed by India was the provision of capital. It was admitted on all hands that capital is badly needed in India for the development of her resources and the general industrial channels in India as freely as in other countries. It was necessary therefore that Government should, as a matter of both of principle and policy, finance such concerns as held out the best prospects of success. The resolution was supported by practically all the non-official members of the Council. The Hon Sir Gangadhar Chitambar said that his experience in the Central Provinces had satisfied him that for Indian industrial development some scheme or financial assistance was desirable. Failure in many cases was due to scarcity of liquid capital at a time when it was most needed. This

was a country of small capital, and when a manufacturing industry was started it frequently happened that the bulk of the capital was used up in the initial stages leaving only a small margin to serve as working capital. In his opinion the Government should be effective in coming from Government. This money should be distributed in the same way as takavi advances. The Hon Mr Dadabhai said there was an insistent and growing demand in the country for pecuniary help to Indian industries. The banks were quite inadequate for this purpose, they came back to the State and State help through the medium of takavi advances. The Hon Mr Ghunawani said that India had none of the advantages which had conduced to the industrial growth of Japan, they had no capital, no skill, and no expert knowledge. They required help for the encouragement of small industries, such as weaving, spinning, sugar manufacture, articles, all these could be fostered under judicious guidance if capital were forthcoming. The Hon Mr Banerjee hoped that the Government would accept the resolution. They felt with all the depth of affection which they possessed that the future of India largely depended upon her industrial prospects. We talk of political regeneration, self-government and so on, but in our hearts we feel that political regeneration can only come in the track of industrial growth and emancipation. We have the history of Japan before us, we have the history of Germany before us, The Hon Mr Carr briefly described what had been done for the promotion of industries in Madras. He said the difficulties experienced were the employment of experts, the building of factories, the erection of machinery, and the provision of capital. The Madras Government in addition to providing experts for investigation and guidance had advanced a sum of nearly two lakhs of rupees for the starting of special work in connection with industries in which the economic situation appeared to justify the hope that something new might be done. Work had been started on a pencil factory in Coimbatore, on the revival of glass factory, on oil refining experiments, on oil refining experiments and on soap making experiments. The Hon Sir Ibrahim Rahimtoola said that the suggestion of takavi advances was tantamount to making Government start the business of lending money on the mortgage of industrial concerns with more stringent powers of recovery of interest and principal than are possessed by ordinary mortgages. Then what would happen to these industries immediately the war was over? They would be confronted by the subsidised and State aided competition of foreign countries. It would take two or three years before these industrial concerns were ready to produce manufactured goods, by that time the same competition which had operated against the success of Indian industries in the past would be revived. Then what would become of these new ventures? There would be a good chance of success for new industries if India was allowed to work on the principles of fair trade. The Hon Sir Fazlulbhooyah said there were weighty political reasons to justify the acceptance of the resolution.

possibly spaced out by considerable periods during which all the work previously done had been lying idle and all the capital employed had been lying idle. He submitted that it would be inexpedient to fail to proceed with the construction of the small new railways provided for in the Budget. They had to look forward to a great revival of trade when the war was over. There was also the question of employment, it was very undesirable that anything should be done to lead to greater unemployment, but it was very undesirable that the railway grant should be the result of the war. The Hon. Mr. Ghaznavi showed that there was a profit from the railways and the irrigation works of some six millions sterling. There were other ways in which money for education and sanitation could be obtained than by curtailing the railway budget. The Hon. Mr. Ghaznavi pointed out that the Budget reduced the railway grant from £12 millions to £8 millions. His own opinion was that to go ahead properly and to maintain the railways something like £15 millions sterling or £16 millions was required. Those who had advocated the claims of education, in the circumstances, should be well pleased that they had received almost as large a grant during this year of war as they had ever had before. The Finance Member showed that the Railway programme had been curtailed by one-third. He did not in the least undervalue the benefits of education and sanitation, but the people were equally benefited by an expansion of railway facilities, which expanded trade, mitigated the effects of famine or scarcity, and added to the personal convenience of Indian travellers. The financial effect of Mr. Dadabhai's proposal would be not merely to add to their Imperial revenue deficit, but to diminish their cash balance, and to increase proportionately the amount of new year's borrowings on account of the unproductive debt, the productive borrowing being decreased in the proportion from the annual point of view. This was a most unseasonable proposal. Taking all the heads together the diminished outlay under education and sanitation was trifling in comparison with the reduced provision made for railways. The Hon. Mr. Abbott opposed any reduction in the construction of railways and the resolution was rejected. The Hon. Mr. Dadabhai proposed a resolution that the court of the Judicial Commissioner of the Central Provinces be replaced by a Chief Court, consisting of five Judges or more. He said that the Judicial Commissioners' Court was unsuited to the present conditions of the Central Provinces and that the development of the Provinces had been very great indeed. Notwithstanding the ravages of plague and famine, the population had grown from 10,579,181 in 1871 to 16,033,310 in 1911 or an improvement of nearly 50 per cent. Such a progressive population demanded better and more up-to-date arrangements for the administration of the Province and the existing arrangements failed to satisfy them. The growth and importance of the Provincial people required that a Chief Court should be established at Nagpur. Sir Gangadhar Chitambar said there was a desire among the local people for an improvement in the machinery for the administration of justice in the Chief Court of the Province with a view to cope expeditiously with the increased work on account of the development of the Province. The Hon. Mr. Ghaznavi also contended with the new sense of dignity which the Province now had. The Home Member felt doubtful whether the matter alteration in the name and status of the Court was going to alter materially the nature of the justice administered by that Court. However, he hoped the mover of the resolution would be satisfied if the attention of the local administration was drawn to his resolution and an opportunity given to the local administration to consult with their officers, with the Judges of the Judicial Commissioners' Court and with non-official members. When they had considered that question, if the change was recommended by the local administration and it was considered by the Government of India that a case had been made out, no doubt necessary action would be taken. The resolution was withdrawn.

The Council, re-assembling on March 9th, commenced the second stage of the discussion on the Budget, when it is considered head by head. The Revenue Member introduced the items concerning his department, when the Hon. Pandit Madan Mohan Malaviya moved a resolution that the budget allocation for productive irrigation works be increased by fifteen lakhs of rupees. His argument was that the Irrigation Commission recommended that the whole amount of the Finance Insurance Grant should be devoted to irrigation minus such sum as may be needed for the actual relief of famine when it should occur, but they found that even that figure had not been maintained. In 1913-14 the amount spent was Rs. 92,33,927, whilst in the budget for last year Rs. 1,80,00,000 was provided and Rs. 1,74,96,000 spent, and in the budget for the coming year only Rs. 1,55,00,000 were provided. In the budget before the railways were expected to yield 32 per cent and irrigation 5.80 per cent. It seemed then that irrigation was ever so much more profitable than railways, as well as being more beneficial in many respects. The Revenue Member, whilst welcoming the resolution, said that they had provided in the budget for the full amount which they reckoned that they could spend. There were very great difficulties in preventing large irrigation schemes. Still, they hoped to be able to spend more freely in future when the works now under consideration were put in hand and eventually in a great economy of water. He had done all in his power to spend the largest possible sum on protective irrigation works. The motion was rejected.

The Education Secretary and the Member for Commerce having introduced their heads of motion, the Hon. Pandit Madan Mohan Malaviya moved a resolution recommending that a sum of twelve lakhs of rupees be provided in the budget to aid and encourage indigenous institutes. The debate on this subject followed the lines of the earlier discussion on the same subject, which has already been fully summarised. No new matter was introduced into it. The Member for Commerce opposed it on the ground that the mover had not suggested that his twelve lakhs should be

provided from other sources and on the existing new policy. The resolution was defeated on a division by 36 votes to 14.

The Hon. Pandit Madan Mohan Malaviya next moved that the budget allotment for the working expenses of the railways should be reduced by ten lakhs or rupees. In so doing he drew attention to the rapid rise in the working expenses of the Indian railways since the establishment of the Railway Board. Prior to the Board came into existence that is to say up to the year 1905, the percentage of working expenses to gross receipts averaged from 40 to 45. By 1909 it had gone up to 62 per cent and by 1910 to 55 per cent. This rapid rise in the working expenses necessarily reduced the profits on the railway system which were only 35 per cent in the present year and were estimated at 32 per cent in the coming year. The railways had cost immense sums and the country was getting very small returns. The Minister for Commerce pointed to the difficulty of cutting down ordinary expenditure merely because traffic fell off. A great proportion of the working expenses must be fixed expenses such as wages of staff and working costs could not be largely reduced merely because a few trains had been taken off. The railways had done very well to direct the substantial saving that had been secured. With regard to special expenditure, when members discussed the question of the railways up to the capacity of the traffic demands upon them they forgot the acute congestion on the railways during the past two or three years and the complaint which arose on all hands in commercial circles. It was undeniable that injury had thus been done to trade. Later the Government had pursued a policy of steady and continuous development, he did not the slightest doubt that they were doing right and were acting in the best economic interests of India. It was one of the matters on which he looked back with the greatest satisfaction now that his five years in India were drawing to a close, that he would leave the railways in a far wiser way than he expected to be made upon them. The resolution was rejected and a consequential resolution, proposing that the capital expenditure on railways should be reduced by twenty-five lakhs of rupees, by the same member and the Finance Member introduced their respective heads.

When the Council reassembled on March 12th the Indian Steam Vessels (Amendment) Bill was introduced. The Commerce Member moved for leave to introduce a Bill further to amend the Assam Labour and Emigration Act, 1901. He explained that the object of this Bill was to secure a closer and more adequate supervision or recruitment of labour for the tea gardens in Assam. It provided for the complete abolition of recruitment by contract in Assam which had been found in the past to be least susceptible or proper control and to have been the most open to abuse. Recruitment will be controlled almost entirely through garden sardars working under local agents, that is to say, by men employed on the gardens who came out for recruiting purposes to the recruiting districts and are there controlled by local agents. These local agents will be supervised by a board and its staff. The Commerce Member introduced the tea customs (Amendment) Bill dealing with a single point in Indian customs law. The effect of this amendment will be to make the duty chargeable on goods in warehouses the duty in force at the time of their actual removal. The Home Member moved that the report on the Foreigners (Amendment) Bill be considered and the Bill as agreed to was passed. The Hon. Mr. Ramesh Chandra Prasad introduced a Bill to amend the Indian Vernaculars Act, 1907, with a view to making the medium of instruction in all secondary schools. This Bill raised again what is commonly known in India as the battle of the vernaculars, and resulted in a wide diversity of opinion. The move would reveal that a little examination would reveal the superior advantages of imparting instruction through the vernacular. If any real knowledge was sought to be communicated to an untransliterated boy, the medium of the mother tongue must have no doubt advantages. If attention was directed to the difficulties of a foreign tongue in addition to the immature mind and naturally failed to assimilate either the language or the knowledge it was sought to convey. This led to cramming and the mechanical repetition of half understood sentences. In another direction the present method worked a hardship. No serious attempt in the direction of spreading female education could be carried out without providing a remunerative basis for secondary education. The Hon. Mr. Dadabhai opposed the motion on the ground that it was calculated to be prejudicial to the best interests of the country. Through out the long controversy between Orientalists and Vice-Chancellors over the medium of education the governing principle of the advocates of English was the creation in India of a class of men thoroughly grounded in European science, arts and philosophy, who would serve as the connecting medium of Western culture to the general population. The move, though that English education had failed to stimulate thought and original research. If he had reviewed the history of the past fifty years he would have found sufficient material to modify his views. The Hon. Mr. Ghazalai joined him in this. The Hon. Mr. Banerjee said, speaking for Bengali, that any proposal involving a curtailment of English education would be viewed by the countrymen with much disapproval. He explained that the Hon. Mr. Dadabhai's agreement with the Hon. Mr. Banerjee was in complete agreement with the Hon. Mr. Dadabhai's agreement with the Hon. Mr. Banerjee.

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"would amend his resolution so as to embrace this policy Government would accept it."

An interesting debate followed. The Hon. Sir Ibrahim Rahimtoola said the sympathy of the people could not be with the cultivators who would be deprived of the substantial profit which would accrue from high prices. He perceived a sliding export duty of the wheat export he suggested that it should be done through the Supply and Transport department. The Hon. Sir Gangadhar Chitambar said that the action taken by Government was essentially desirable on political grounds. The Hon. Mr. Dadabhai maintained that the cultivator would not be prejudiced for any material extent. The Hon. Sir Fazlulohy Currimbhoy argued that economic theories apart, the distress caused by the abnormal price or wheat had a deep political significance and it was incumbent on the Government to make an earnest attempt to keep it down. The Hon. Mr. Montefiore urged that the less Government interfered in the trade the better and it was reasonable that existing channels of the export trade should carry on the agency of the future exports. The resolution as amended was passed.

At the meeting of March 21, the Hon Sir Ibrahim Rahimtoola moved a resolution stating that it was desirable that State Railways in future should be managed by the Government instead of by Managing Companies. The advantages which he expected to result from such a system were as follows —

- (1) The saving to the State of the share of profits now paid to the Managing Companies
- (2) The development of trade and commerce on natural lines instead of the present artificial division by means of big prices.
- (3) The growth and development of industries especially in the interests of this country
- (4) The promotion of inter-provincial trade
- (5) The centralisation of control in 1 public State Department located in India and amenable to Indian public opinion instead of in Boards of Directors in London

The Hon C Mr Marshall Reid opposed the resolution on the ground that it reversed one very important principle, namely, decentralisation. Secondly, because it added a great deal of responsibility to a department in which it aimed at reducing the power and mainly responsible for controlling railways. The Hon Mr Abbott also opposed the resolution because it would kill competition. The Hon Mr Setaad took the same line on the ground that no State department would have the same initiative as a public company. The Hon Mr Monteth said that subject to improvements in detail the present system was the best.

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of ever-increasing complexity arising every day. Government. The principle of Executive Councils for local Governments, by which the local administration is less dependent upon the personal equation and which ensures a greater continuity of policy, has already taken root in India and cannot now be eradicated. Moreover the inclusion of an Indian gentleman in the Council of a province is to my mind a source of great strength to the Governor or Lieutenant-Governor. I speak from my own experience, and have no hesitation in saying, without any idea of flattery, that the presence of my friend Sir Ali Imam on my Council and his knowledge and experience are and have been of the greatest possible advantage to me and my Government. I can well understand that all educated people of this country will be disappointed at the result of the action of a small party in the House of Lords but I would ask them not to be depressed for I regard the proceedings of the 16th March in the House of Lords as only a temporary setback, and I feel as confident that the United Provinces will have its Executive Council within a very short period so that the dawn will follow the night.

"The activities of the Council during the current session have necessarily been circumscribed by the decision to avoid as far as possible all controversial business. Nevertheless some measures of importance have come under your consideration. I need only refer to the measure recently passed in this Council to secure the defence of India and the public safety, in order to express the thanks of Government for your loyal co-operation in enacting this measure. Another Bill of importance has also been passed in this Council, namely, the Assam Labour and Emigration Act, which I hope will mark a stage in our efforts to remove abuses attendant on the present system of emigration and in securing that the welfare of labourers recruited to Assam is adequately safeguarded. The only other measure of importance to which I need allude is the Benares Hindu University Bill which was introduced into this Council on the 22nd. It will be a source of gratification to me if this measure becomes law during my tenure of office as Governor-General. The Council then adjourned sine die.

The Council met again at Simla on September 17th. The Indian Frusts (Amendment) Bill was introduced. The Indian Soldiers Litigation Bill providing for the special protection in respect of civil and revenue litigation of Indian soldiers serving under war conditions was introduced. The Repealing and Amending Bill and the North-West Frontier Constabulary Bill were introduced and the Sir Jamsetjee Jeejeebhoy Barelly Bill was passed and the Inland Steam Vessels Bill was referred to a Select Committee. The Benares Hindu University Bill was sent to a Select Committee on September 22. The Indian Ports (Amendment) Bill was introduced as well as the Indian Medical (Boys) Degrees Bill. The Commercial Memorandum introduced the Enemy Trading Bill which provided facilities for the payment to a public authority of the

"The first important debate was on a motion by the Hon. Mr. Shaikh asking for the direct representation of India at the next Imperial Conference. The mover said that it was a source of deep disappointment as well as of profound astonishment that in spite of her prominent position in the galaxy of peoples and countries constituting the British Empire, of her political, economic and strategic importance, of the obvious utility of her participation in the deliberations of the Conference and of the valuable services rendered by her to the Empire, India should have been hitherto excluded from this scheme of Imperial Federation. Continuing he asked, "My Lord, as then a single problem of Imperial or even international interest in which India as an integral and an important part of the British Empire, is not directly concerned? Is there a single Imperial question in relation to which the interests of Great Britain, of the self-governing Colonies, and of India are, under the existing conditions, not indissolubly bound together? Can any scheme of Imperial defence be regarded as complete without taking into account India's defensive requirements and her offensive capability not only in relation to her own frontiers, but, as recent events have made it abundantly clear, also in connection with the military needs of the Empire in every portion of the globe? Is it possible to evolve any scheme of Imperial Preference, or to introduce any workable Imperial fiscal reform, without taking into consideration what may be called India's inter-Imperial interests? To these and other cognate questions there can be but one answer. India is directly and materially interested in all important problems of the Empire, of which she is proud to form an integral part, to the same extent and in the same degree as any other portion of His Imperial Majesty's vast dominions." India, he concluded, was not content with the occasional presence of a Secretary of State at the Imperial Conference, what she wanted was her own direct representation like the British Colonies.

His Excellency the Viceroy intervening early in the debate made the following important pronouncement—

"At the Imperial Conference of 1911, the Secretary of State for India was present at a meeting, but India herself had no recognised place in this Conference.

"Representation is, therefore, at present confined to the United Kingdom and the self-governing Dominions, and no one can now attend the Conference as a representative except a Minister. Further, alterations in the constitution of the Conference are made only by and at the Conference itself, and, it precedent be followed, take effect only at the next succeeding Conference. From this statement of the actual constitution of the Imperial Conference you will see that the ultimate decision upon the representation of India at the next meeting of the Council rests with the Council.

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In winding up the session His Excellency the President again reviewed the situation in India as a whole. He said —

In India, fundamentally, there is no provision, and we have succeeded in restoring order in the Punjab which had been disturbed during the course of last year. We have the return of investment from England and the financial help of India. I must not forget the return of the powers of India. I must not forget the powers of India. I must not forget the powers of India.

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The Unit of Atomism has from the beginning of the war observed an attitude of strict neutrality and I have never reason to believe that it will be eligible in the future.

In the afternoon the situation leaves much to be desired. The British are still in the hands of the Germans, and the latter are still in the hands of the British. The only thing that has changed is that the British are now in the hands of the Germans, and the Germans are now in the hands of the British. This is a very strange situation, and it is not clear what the result will be.

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I do think all that we
 express at the present time
 is a call for the abolition
 of slavery in the nation and
 support of the free man
 who is now struggling
 for his freedom from the
 bondage of slavery.

The Council met on the 1st of October when the North-West Frontier Constabulary Bill and the Enemy Trading Bill and the Inland Steam Vessels (Amendment) Bill were put in the Report of the Select Committee on the Hindu University Bill was taken into consideration and it was proposed that the Bill be passed after several amendments warmly welcoming the Bill and the attitude of Government towards it had been made the proposition is unanimously agreed to.

Bombay Legislative Council.

The Council met at Bombay on March 13, 1915, and adjourned to the 15th after passing a resolution placing on record his sense of sorrow at the death of Mr G. K. Gokhale and its appreciation of his services on the Imperial Council and the Bombay Council. The Financial Statement presented by Sir Richard Lamb showed that the war had affected profoundly to a very limited extent. The Budget for 1915-16 opened with a balance of Rs 1,51,728,000 which it is anticipated will be reduced to Rs 1,29,01,000 by the end of the year, the total revenue being estimated at Rs 7,49,00,000 and the total expenditure at Rs 7,71,77,000. The Bombay certificate of helpship Bill was withdrawn, and the Bill to authorise the levy of dues on vessels for the provision of lights on the coast of Sind was read a third time, after the defeat of an amendment in favour of exempting from the payment of dues country craft carrying less than 20 tons.

The Hon Mr Hall, in introducing a Bill to amend the Bombay Protection of Pigsties Act, 1887, said this was a simple police measure designed for the immediate betterment of the conditions under which pigsties have to proceed to the high, giving the Executive power to control the action of the shipping companies in regard to the rates of passage charged by them. The Bill was referred to a select committee, and in July, after some discussion, it was passed into law. The Hon Mr V J Patel moved a resolution recommending Government to consider the desirability of putting the Official Assignee and the Official Receiver, Bombay, on suitable fixed salaries. The resolution, which did not commit Government to any definite line of action, was accepted.

The Council met at Poona on July 12, when the revised budget was discussed. Features of the meeting were a resolution affirming the loyal support of India to the Imperial Government in the prosecution of the war and another expressing gratitude to the King Emperor for extending Lord Hardinge's term as Viceroy and to Lord Hardinge for his acceptance of a further term of duty in his office. This being the last meeting to be attended by the Hon Sir Richard Lamb before his retirement, complimentary speeches in his honour were made.

The Hon Sir Pishashankar Dattani introduced a Bill to amend the City of Bombay Municipal Act, 1888 explaining that the proposal in it emanated from the Corporation and was designed to facilitate the administration of the city. Sir Ibrahim Rahimtulla and others spoke about the compensation to be paid by the Corporation for land acquired or demerits of the avaricious system of medical in contrast to the Western system. The discussion was led by the Hon Surgeon-General Lyons, supported by the Hon Col Jackson, whose criticisms of the avaricious system elicited strong protests from various Indian members.

A Bill to amend the Bombay Medical Act was introduced by the Hon Mr W D Shepherd, and referred to a Select Committee. The Bill was read a first time and lawyers' amendments of expert land values and lawyer's Select Committee. It was passed at the Law Commission meeting.

A Bill to amend the Bombay Medical Act dealing chiefly with the register of practitioners was introduced by the Hon Mr W D Shepherd, and referred to a Select Committee. The proposed levy of the survey fee elicited criticism from Sir Ibrahim Rahimtulla, who maintained that the burden of this liability, amounting to three lakhs should not be thrown upon the citizens of Bombay in addition to the Municipal contribution. Bombay was already paying nearly 25 lakhs per annum more in the shape of Municipal taxation than Calcutta with about the same population, but in Calcutta the survey fee was borne by Government. The analogy was not accepted by Sir Richard Lamb and Mr Carmichael, and the Bill was read a third time and passed.

Among the resolutions discussed by the Council was one in connexion with the interest charged on loans given under the Land Improvement Loans Act, several members urging that Government should not make a profit on tax-land transactions. A resolution by the Hon Mr Gokhale led to the explanation by Sir Richard Lamb of the policy of the Hon Government in regard to guarantees by local Governments to tender with 15% and a discussion of the working of the Local Boards close.

At the meeting of the Council in December, 1913, after passing a resolution expressing the sense of loss felt at the death of Sir Pishashankar Dattani, the Bombay Medical Act (1912) Amendment Bill was passed. Two new Bills were introduced and passed, the Bombay Landing and Wharves Act, the object of which is to raise a fund for the improvement of the land-lying places at minor ports in the Presidency by levying a small charge on each passenger travelling by vessels touching at those ports and the Sind Courts Act (1886) Amendment Bill, which gives the Judicial Commissioner in Sind power to deliver oral judgments. The meeting was chiefly noticeable for a discussion on a resolution which asked for an amendment of Section 11 of the Bombay Medical Act in such a way as to enable the Municipalities to support dispensaries conducted by avaricious medical practitioners. This incidentally led to a discussion on the merits or demerits of the avaricious system of medical in contrast to the Western system. The discussion was led by the Hon Surgeon-General Lyons, supported by the Hon Col Jackson, whose criticisms of the avaricious system elicited strong protests from various Indian members.

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The bill was introduced by Mr. [Name] on [Date]. It was referred to the Committee on [Committee Name], which reported it on [Date]. The bill was then passed by the House of Representatives on [Date] by a vote of [Vote]. It was then sent to the Senate, where it was passed on [Date] by a vote of [Vote]. The bill was then signed by the President on [Date].

THE MICHIGAN IRRIGATION BILL

The United Provinces Legislative Council.

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mad Shah and other speakers referred to the aspirations of the province in the matter of a High Court and an Executive Council. In summing up the debate Sir Michael O'Dwyer dwelt on the prosperous state of the provincial finances and on the many calls that were being made on them for larger expenditure in all directions. He spoke of the far-reaching effects of the war and of the economic distress caused by the rise in the prices of food-grains. Dealing with the organ and conspiracy of returned emigrants to subvert the Government and the outbreak of lawlessness in the Western Punjab, he described the measures taken to cope with lawlessness. Government, he affirmed could face these outbreaks with equanimity because they had proof that the overwhelming majority of the people of all classes and creeds were determined to support him in quelling the disorder. Finally His Honor declared that the real temper of the people was shown by the splendid way in which Mahomedans Sikhs and Hindus alike had rallied to the call of the Empire and were shedding their blood in its defence.

At the 25th meeting of the Council on September 25th the amended rules for the conduct of business introduced at the last meeting were passed. The Military Transport Bill was also passed. The Hon. Mr. Thompson introduced the **Medical Practitioners' Registration Bill**. The main feature of the Bill was the institution of a Medical Council of twelve, half to be nominated by Government and half to be elected by registered practitioners. The main duty of the Council would be to keep a register of practitioners who in its opinion were properly qualified in western medicine and surgery, and it would have power, subject to an appeal to Government, to remove the names of those who had been convicted of offences or have been found guilty, after inquiry, of infamous conduct in any professional respect. It would also be made a punishable offence for a person falsely to pretend that he was a registered practitioner. The Bill did not interfere with hakims and vaidas and did not prohibit practice by unregistered practitioners. It was referred to a Select Committee. The Lieut-Governor closed the session in a powerful speech in which he reviewed

the condition of the province. He said the seasons' monsoon had been the worst known since 1877. Fortunately timely rain had fallen all over the Province, except the Rawalpindi and Multan divisions and had saved the situation at a most critical time. Turning to the question of public security he referred to the measures taken to meet the sudden outburst of disorder in the south-west and reviewed the revolutionary movement & returned emigrants. He said that the Government had all over the Central Punjab from November 1914 to July 1915—and they had not yet ceased—but in some cases of terror and even panic, and if they had not been promptly checked by the firm hand of authority and the active co-operation of the people, would have produced in the province as was intended by the conspirators, a state of affairs similar to that of Hindustan in the Mueiny—paralysing of authority, widespread terrorism, munity of troops, whole-sale robbery and murder not only of the officers of Government but of loyal and well-posed subjects. He went on to point out that though most of the conspirators were Sikhs, they were in no way representative of the Sikh community, which had given such signal proofs of its valour and devotion in this war. The conspirators had been publicly disowned and repudiated by that community and it was the active help given by Sikhs throughout the province and by the authorities of Sikh states that enabled so many of the criminals to be brought to justice. Of 6,000 returned emigrants, His Honor said, 250 believed to be the most dangerous had been temporarily interned as civil prisoners, 1,700 had been restricted to their villages or put on security and 4,000 had been allowed complete liberty of movement. In conclusion Sir Michael O'Dwyer spoke of the great part the martial races of the Punjab were taking in the war. Almost half the troops sent overseas were Punjabis and of 99,000 recruits added to the Indian Army since the beginning of the war 44,000 were from the Punjab.

During the year the Council lost a valued unofficial member through the death of Sir Arthur Ker and another member Sardar Dhill Singh, relinquished his seat on appointment to the Council of India.

Burma Legislative Council.

The legislative harvest for the year was very small. This was natural in the special circumstances caused by the war and the impending return of the Lieutenancy Governor in the interval between the end of the financial year and the departure of Sir Harvey Atkinson at the end of October. The period covered by the revision of Sir Harvey's service, no new Bill was introduced though there was a certain amount of preliminary work carried out in connection with measures to be discussed. The first meeting of the Council took place on March 15th when the Hon. Mr. Rice introduced the **Burma Medical Bill**, which follows the lines of similar measures enacted in other parts of the Empire.

The Bill provides for the registration of duly qualified medical practitioners, it also renders registered practitioners subject to the control of a medical Council made up of five members elected by the resident registered practitioners and four, including the President, nominated by the Local Government. The Council will have full control over the Registrar to be appointed and an appeal lies to it from any revision of the Registrar to register an applicant. The Council has also the power to strike off the register any member who has been convicted of a considerable offence or who has been found guilty of immorality or unfitness to conduct after due inquiry by the Council. An appeal is allowed

of ill Turkish officials and businessmen in Istanbul and regretted the success of the coup as it allowed them to take a more reasonable view of the situation and to begin to work for a more rational and peaceful Turkey. The members of the Council on April 3rd

considered the report of the Select Committee on the Bureau Medical Bill. No amendments of a drastic nature were suggested in the discussion on the bill. The Hon. Mr. DeLoach stated that the proceedings on any legislation should be conducted in a restrained and dignified manner. He stated that the committee was in agreement with the chair, and that the committee should be conducted in a restrained and dignified manner. He stated that the committee was in agreement with the chair, and that the committee should be conducted in a restrained and dignified manner. He stated that the committee was in agreement with the chair, and that the committee should be conducted in a restrained and dignified manner.

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The suggested that it would be interesting to know how much of the heavy annual expenditure from various sources was divided amongst Primary Technical, Elementary Anglo-Vernacular, Secondary and Higher University Education, and also on various forms of Technical Education. He expressed dissatisfaction with the results of Anglo-Vernacular Education and asked whether it was not time to discontinue expenditure from public funds on higher education and apply the available balance to primary technical education. The Hon. Mr. Rice pointed out that under the Burma Village Act the headman had ample power and authority or assigning him was imposed on all inhabitants of the village tracts. It was the consistent policy of the Government to encourage headmen to go to exercise those powers and they did in fact give considerable assistance in the prevention and detection of crime. The Hon. Mr. Keith explained the system under which forests were leased to private persons at a fixed rate of royalty for fifteen years with the right of

From the action of the committee to the local government, it took for registration of these classes. Those members of the first and under the Middle West, those holding medical degrees, or one of the British Empire, and those who have been trained in a government Medical School and in quality as military assistant surgeons or hospital The bill was referred to a select committee.

The first of the two is the "Financial Statement" which is included in the annual report of the company. The second is the "Statement of Financial Position" which is included in the annual report of the company. The first of the two is the "Financial Statement" which is included in the annual report of the company. The second is the "Statement of Financial Position" which is included in the annual report of the company.

...the outbreak of the war the Hon Mr Lloyd George moved that this Council records its deep conviction of the righteousness of the cause of Great Britain in the present war and assures the Ministry Government and the millions of loyal and devoted to the British Throne of all communities and classes in Britain its full support in the movement for the restoration of the rights of the people of the British Empire and the Crown Prince, including the Sultan and the Crown Prince, were adverse from war. The motion was seconded by the Hon Mr Corry, who pointed out one redeeming feature in connection with the war. It had caused a tremendous wave of loyalty to sweep over the whole Empire, especially India, and illustrated to the whole the magnanimity of the British Empire. The honorable gentleman expressed his sense of deep obligation to the British Navy for the victory with which it had cleared the seas of the enemy's ships and enabled commerce to proceed without interruption almost as safely as in time of peace. His Honour the President supported the resolution in a speech in which

renewal on revised terms for another fifteen years. Thus Government did not get the benefit of a rise in the price of timber, but on the other hand it was guarded against a loss when the price fell. A scheme for the strengthening of the forest establishment was under preparation.

His Honour the President briefly reviewed the effects of the war on the industries and finances of the province and found a cause for congratulation in the fact that the [destruction] had been far less serious than might have been anticipated. The worse sufferers from the war had been the rubber growers of Moga, many of whom had been compelled to migrate and find subsistence elsewhere. The chief inconvenience to the province as a whole was the shortage of shipping and the high rates of freight. But Burma shared this inconvenience with other parts of the Empire in the inevitable consequence of a great war.

The Council then adjourned sine die.

Bihar Legislative Council.

The Council met on January the 19th when His Honour the Lieutenant Governor referred to the splendid loyalty of the Province. The Hon Mr Bisham Prasad moved a resolution expressing to the King Emperor the unqualified loyalty of the people of the Province and the war which Britain had been compelled to undertake, also of gratification at the employment of Indian troops. The resolution was unanimous. It carried. Replying to questions it was stated that the main buildings under construction for the Imperial Government House and Council Chamber the Secretariat the Post and Telegraph Offices and the High Court. The foundations of these buildings had been finished and work on the superstructures was well advanced. On March 19th, the Hon Mr Gait presented the revised financial statement. He said that owing to the war they had been asked by the Government of India to restrict their expenditure as much as possible whilst next year they had been permitted to draw on their balances to the extent of 33 lakhs. The greater part of this expenditure would be on the erection of buildings in the new capital. Many reforms which they were on the point of introducing, including the scheme for the reorganisation of the school system and a more liberal system of scholarships in schools and colleges, had thus been postponed. Owing to the disruption which had thus been caused it had been decided to postpone for the present the revision of their provision financial settlement which would otherwise have been made with a view to the introduction of a permanent settlement with effect from the commencement of the coming financial year. On April 19th, the Hon Mr Bisham Prasad moved a resolution asking the coming official year. The Hon Mr Gait also moved for leave to introduce the Bihar and Orissa Medical Bill, 1915 which was referred to a Select Committee. Several members then addressed farwell speeches to His Honour the President who is leaving India in his reply the President referred to the need for co-operation which would be manifested during the next year or two in this as in every other province owing to the period of financial stringency which was in store.

The Public Trustee.

The particulars of any trust in which it is desired that the Public Trustee should act may be brought to his notice by letter or by personal interview, and upon his assent being obtained, his appointment should be effected in the ordinary way as in the case of private trustees. In the case of a Will about to be made, his appointment can be secured by the simple provision "I appoint the Public Trustee or his executor and trustee or this my Will."

One of the forms of trusteeship which would appeal to English people residing in India is a scheme known as a "Declaration of Trust." An official pamphlet explains that the Public Trustee's services have been requested by people who, either because of professional or business pre-occupation, or from want of expert-ness in dealing with money matters, or from the disadvantages which might attach to the dis-advantages, professional or business dis-abilities abroad, are not well placed to select and supervise their investments. It would appear that the services of the Department in this matter were first requisitioned by officers taking up appointments in India and following out their request for individual assistance in this scheme or trust came to be devised, and has been round to commend itself to the circumstances of a very large circle of persons situated over the world.

The main lines are of two kinds—a fee on capital and a fee on income. The fee on capital is taken in two instalments—an instalment of half taken at the beginning, and another instalment of half taken at the end of a year. The fee on income is calculated at the rate of 1 per cent on the income of the property, and an annual sum of money to be invested or specific securities transferred into his name, and thereupon the Public Trustee executes a short "declaration" setting out that he holds the money invested for the securities in trust for the transferor or the result of this is that income, as it accrues, is paid to the owner or to any beneficiary as he may direct. A wide field of investment is permitted, as the trust provides that the funds may be invested as the owner may from time to time direct. As the pamphlet sets out interest at the rate of at least 1 per cent is to be looked for under the scheme from investments of a non-speculative character. It should be understood that this form of trusteeship is not analogous to a bank deposit, where the return on the capital at par, given the solvency of the bank, is expected. Investments are selected with the greatest care in consultation with the Public Trustee does not accept responsibility for any fluctuation of any of the investments chosen. The fee payable for this scheme or trusteeship, so far as the capital is concerned, are half those payable in the case of an ordinary settlement. The other fees are the same as the ordinary fees.

The appointment of the Public Trustee secures certain definite advantages inasmuch as he is by Act of Parliament a Corporation Sole and thus it is said the Public Trustee never dies, so that the expense of appointment of other Trustees is permanently avoided. His attention to all matters within the day.

The Public Trustee of England is a Government official created by statute (Public Trustee Act, 1906) whereby the State acts as an executor or trustee under Wills and as a trustee in other trusts, whether the trusts are of real or personal property, and in other cases of an analogous character.

The office has been a great success, in the view of the fact that it has been open the value of the trust property in court of administration has increased. In round figures to £50,000,000, while the estimated value of Wills lodged in the Registry at which year to mature is £1,000,000,000 showing a total value of £1,500,000,000.

Fees chargeable—The office is now entirely self-supporting and is no charge upon the Exchequer. A provision of the statute declares that the Office is to make no profit but to charge only such fees as may provide the working expenses and constitute a reserve fund against the liabilities assumed by the office for breach of trust. The fees have already been reduced from their original scale, and the cash surplus of the office is now for all contingencies, is now £1,500,000.

The main lines are of two kinds—a fee on capital and a fee on income. The fee on capital is taken in two instalments—an instalment of half taken at the beginning, and another instalment of half taken at the end of a year. The fee on income is calculated at the rate of 1 per cent on the income of the property, and an annual sum of money to be invested or specific securities transferred into his name, and thereupon the Public Trustee executes a short "declaration" setting out that he holds the money invested for the securities in trust for the transferor or the result of this is that income, as it accrues, is paid to the owner or to any beneficiary as he may direct. A wide field of investment is permitted, as the trust provides that the funds may be invested as the owner may from time to time direct. As the pamphlet sets out interest at the rate of at least 1 per cent is to be looked for under the scheme from investments of a non-speculative character. It should be understood that this form of trusteeship is not analogous to a bank deposit, where the return on the capital at par, given the solvency of the bank, is expected. Investments are selected with the greatest care in consultation with the Public Trustee does not accept responsibility for any fluctuation of any of the investments chosen. The fee payable for this scheme or trusteeship, so far as the capital is concerned, are half those payable in the case of an ordinary settlement. The other fees are the same as the ordinary fees.

On the excess of £50,000, one shilling and three pence per cent. The fee on income is one per cent. If as is usual, the income be paid direct from its source to the person entitled, on any income in excess of £2,000 a year the fee is only 1/2 per cent. Where the income is paid through the Department the fee is two per cent up to £500 a year, and one per cent on any excess or £500 a year, and 1/2 per cent on income in excess of £2,000 a year. The fee on investment is 1/2 per cent. The Public Trustee out of this fee, paying the brokerage. There is power to vary these fees to meet the peculiar circumstances of special cases, but owing to the low range of the fees, and their mutual character the power of reduction is but seldom exercised, except perhaps in the case of large trusts.

The Department has been organized upon lines followed by commercial organizations and Forms are avoided wherever possible the methods of the Office prescribing prompt attention to all matters within the day.

integrity is guaranteed by the State, while the measure of his success would indicate that he is necessarily experienced and skilled in his duties

Close personal attention is given by the Public Trustee and his senior officers to the affairs of every trust and as regards the work

to keep them under frequent observation

An Advisory Committee of men of recognised authority has, in the past year, been appointed by the Lord Chancellor to assist the Public Trustee by a quarterly review of the investments made. In the last Annual Report the Public Trustee speaks of having secured a return of £3.10 per cent upon his trustee investments and a return of £4.10 per cent upon his non-trustee investments.

The success of the Department would seem to show that there is a widespread public need in England for such an Office, and the energy and efficiency with which the Department has been constituted and conducted has been a great factor in commanding it to the public. The State Guarantee is also doubtless a factor of great importance. A statutory rule pro-

1 Debts left by the deceased including mort-
gages and mortgages

PROVING OF WILLS

The administration is subject to an audit by the Controller and Auditor-General (the Government Auditor), while the internal organisation has been built up upon the principle of a check and counter check upon the administration.

- 2 The amount of funeral expenses
- 3 Property held by the deceased in trust and not beneficially or with general power to confer a beneficial interest

The particulars of all these items have to be stated in a separate schedule. It is the practice of the High Court to send a copy of these schedules to the Revenue authorities and if parties have not been properly valued, the Revenue department require the petition to be amended accordingly. In certain cases the Court then requires citations to be published and served on such persons as the Court thinks are interested in the question of the grant of probate. If no objection is lodged by any person so interested within 14 days after the publication or service of citation and if the will is shown to have been properly executed by the petitioner entitled to probate, probate is ordered to be granted.

THE INDIAN SCIENCE CONGRESS.

The third annual Indian Science Congress will be held in Lucknow on January 13th, 14th and 15th, 1916. Many of the papers are of purely technical interest, but several deal with education in its relation to Agriculture. By Mr B. Coover, "The Alignment of Holdings," The Application of Botanical Science to Agriculture by Mr A. Howard and Wm. J. V. Brown. Cloud 1916, and the relation to the Monsoon by Mr W.

A Harwood Plant and animal life in water comes in for a good deal of attention, as may be seen from the papers "Seasonal Conditions Concerning Pond-Life in the Punjab," by Mr. Wm Parish, and "A Review of Botanical Conditions of certain Water-Plants," by Mr. J. S. Goddard, and "The Aquatic Weeds of the Godavari and Parana Canals - a Study in Applied Ecology," by Dr. W. Burns. Dr. J. C. Bor is to deliver a public lecture on "Invisible Light."

MEMORANDUM

Subject: [Illegible]

1. [Illegible]

2. [Illegible]

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18. [Illegible]

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21. [Illegible]

22. [Illegible]

23. [Illegible]

24. [Illegible]

25. [Illegible]

26. [Illegible]

27. [Illegible]

28. [Illegible]

29. [Illegible]

BENGAL MASONSIC ASSOCIATION

for

Leducating Children of Indigent Freemasons
Registered under Act XXI of 1860
Instituted in 1869

President—The Right Hon'ble Baron Cram
chael of Shyring, G C M G, District Grand
Master

This Association is supported by capitation
assessments from the Lodges in the District
of Bengal and by voluntary contributions

1 A donation of Rs 500 made in one or
more payments of not less than Rs 50 each
constitutes the donor a *Vice-President* for Life
with the privilege of five votes

2 A donation of Rs 100 constitutes the
donor a *Governor* for Life, with the privilege
of one vote and one vote for each additional
donation of Rs 100

3 A subscription of Rs 16 per annum
entitles the subscriber to one vote for the year
and in extra vote for every additional Rs 16

4 The conditions of the above are the same
whether the donor or subscriber be an individual
or a Lodge, Chapter, or any other society

5 A general meeting of subscribers is held
twice in the year, at Freemasons Hall, Calcutta
19, Park Street

6 The general conduct of the affairs of
the Association is entrusted to a Committee
composed of the President, Treasurer, and
Secretary and of five Members to be elected
at the Extraordinary General Meeting

7 The funds of the Association are devoted
solely to the board and education of children

8 Children are admitted into the Association
at the age of seven years and continue therein
till they have attained the age of seventeen
years

9 This rule applies equally to children of both
sexes without any distinction of religious deno-
minations

10 Elections take place at each General
Meeting of subscribers according to the number
of vacancies and capabilities of the fund

11 No child is eligible to be placed on
the List of Candidates unless his father has been
a Member of some Lodge for at least three
years of that period

Subscriptions and donations are received
by the District Grand Secretary and by the Secretary
of the Association (Herbert E Kent, Freemasons'
Hall, 19, Park Street)

W J Bradshay, Honorary Treasurer
Herbert E Kent, Secretary

BENGAL MASONSIC FUND OF

GRAND COMMITTEE

President

The Right Honourable Baron Cram
chael of Shyring, G C M G, District Grand
Master

The Hon'ble Sir James Macdonald, K C L,
Deputy District Grand Master

C D Stewart P D G W

S A Fairweather, Deputy Grand Treasurer
J A Dalton, Deputy Grand Secretary

H D Kent, Deputy Grand Secretary

SCOTTISH MASONSIC FUND OF

BENEVOLENCE

For the purpose of affording temporary relief
to indigent Freemasons and their families

Grand Secretary—Arthur W Wise,

Liphinstone Building, Murzban Road,
Bombay

THE SCOTTISH MASONSIC BENEVOLENCE

ASSOCIATION IN INDIA

(a) For the purpose of granting annuities to
old and destitute Freemasons and their widows
(b) Granting allowances towards the mainte-
nance and education of the children or decessed
or indigent Freemasons

C D Fairweather, Honorary Secretary and
Treasurer

J C Maitre, Honorary Assistant Secretary,
Liphinstone Building, Murzban Road, Fort,
Bombay

THE INDIA MASONSIC BENEVOLENCE

Registered under Act XXI of 1860
(Established 1873)

Patron

Right Wor'able H E the Right Hon'ble
Lord Lamington, G C M G, G C L, Late Governor of
Bombay

C H Chubb, President
C H Chubb, President

Secretary—Dramroze E Punthakey, Victoria
Street, Pedy Quarter, Karachi

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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

ALL INFORMATION CONTAINED
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1. The first thing I noticed when I stepped out of the plane was the humidity. It was a warm blanket, wrapping around me in a way that felt both comforting and overwhelming. The air was thick with the scent of tropical flowers and the distant call of birds.

of other decorative forms Great ingenuity came to be displayed in the use of pattern and yet remained in its essence what it had always been, indigenous Indian. The manner, the dome, the arch, they contended, though developed under the Moslem influence, were yet, as far as their detailed treatment and craftsman's art were concerned, rendered in a manner distinguishedly Indian. Ferguson is usually regarded as the leader of the former school while the latter and comparatively recent school has at present found an eager champion in Mr E B Havell, whose works, on the subject are recommended for study side by side with those of the former writer. Mr Havell practically discards Ferguson's racial method of classification into styles in favour of a chronological review of what he regards to a greater extent than did his famous precursor as being one continuous homogeneous Indian mode of architectural expression, though subject to variations from the influences brought to bear upon it and from the varied purposes to which it was applied.

Agra and Delhi.

Agra and Delhi may be regarded as the principal centres of the Indo-Saracenic style—the former for the renowned Taj Mahal, for Akbar's deserted capital of Fatehpur Sikri, and his tomb at Secunder, the Jami Masjid and palace buildings at the Agra fort. At Delhi we have the great Juma Masjid, the Fort, the tombs of Humayun, Sultan Jung, &c, and the unique Qutb Minar. Two other great centres may be mentioned, because in each there appeared certain strongly marked individualities that differentiated the varieties of the style there found from the variety seen at Delhi and Agra, as well as that of one from the other. These are Ahmedabad in Gujarat and Bijapur on the Deccan, both in the Bombay Presidency. At Ahmedabad with its neighbours Sirhai and Chhapra there seems to be less of a departure from the older Hindu forms, a tendency to adhere to the lineal and bracket rather than to have recourse to the arch, while the dome, though constantly employed, was there never developed to its full extent as elsewhere, or carried to its logical structural conclusion. The Ahmedabad work is probably most famous for the extraordinary beauty of its stone "jali"—or pierced lattice-work, as in the palm tree windows of the Sidi Sayid Masjid.

Bijapur

The characteristics of the Bijapur variety of the style are equally striking. They are perhaps more distinctly Mohammedan than those of the Ahmedabad buildings in that here the dome is developed to a remarkable degree, indeed the tomb of Mahmud—the well-known "Gol Gumbaz"—is cited as showing the greatest space of floor in any building in the world roofed by a single dome, not even excepting the Pantheon. The lineal also was here practically discarded in favour of the arch. The Bijapur style shows a bold masculine quality and a largeness of structural conception that is unequaled elsewhere in India, though in richness and delicacy it does not attempt to rival the work of the further North. In this we recognize among other influences changes produced by the advent of Islam, the latter. They admit the limits between the light of the dismission and Western Mohammedan work, especially in the light of the dismission and Western Mohammedan work, and Hindu buildings outside those boundaries between Indo-Mohammedan and the adherents of the newer school the

Foreign Influence

There would appear to be a conflict between archaeologists as to the extent of the effect on Indian art produced by foreign influence under the Mohammedans. The extreme view on the one hand is to regard all the best of the art as having been due to foreign importation. The Christian sculptures with their Greek tendencies, the development of new forms and modes of treatment to which allusion has been made, the similarities to be found between the Mohammedan buildings of India and those of North Africa and Europe, the introduction of the intricate and above all, the historical evidences that exist of the presence in India of Europeans during Mogul times, are cited in support of the theory. On the other hand those of the opposite school hold the foregoing view to be due to the prevailing European preconception that all light and leading must come by way of Europe, and the best things in art by way of Greece. To them the Gandharan sculpture, instead of being the best, is the worst in India even because of its Greek tincture. They find in the truly indigenous work beauties and significances not to be seen in the Greco-Bactrian sculptures, and point to those of Bodhi in Jay, the work of Buddhist monks given by the insular position, as showing the best examples of the art extant. It is probable that a just estimate of the merits of the controversy, with respect to sculpture at any rate, cannot be formed till some has obliterated some of the differences of taste that exist between East and West.

To the adherents of the newer school the fundamental similarities between Indo-Mohammedan and Hindu buildings outside those boundaries between Indo-Mohammedan and Western Indian work, especially in the light of the dismission and Western Mohammedan work, and Hindu buildings outside those boundaries between Indo-Mohammedan and the adherents of the newer school the

The art was thus the gainer by the new conditions. It gained in power and variety much as "Classic" architecture gained under the Romans. But it equally lost something too. The Indo-Saracenic is apt to appear cold and hard. The writer was impressed by this on his first view of the Gwalior palace already mentioned. Though a Hindu building that the more sophisticated quality of the Indo-Saracenic work as well as some similarity of detail. It has, being Hindu, a certain amount of sculptured ornament of animated forms, and the general effect of roundness, richness, and interest thereby imparted seemed eloquent in suggestion as to what is lacking in so many of the Mohammedan buildings.

II. MODELS

1. The first model is a simple one, in which the system is assumed to be in a steady state. This is the case when the system has been operating for a long time, and the transient effects have died out. In this case, the system can be represented by a set of algebraic equations, which can be solved to find the steady-state values of the variables of interest.

The archaeological treasures of India are as varied as they are numerous. Those of the pre-Mahamadan period may roughly be divided into (1) architectural and sculptural monuments and (2) inscriptions. No building or sculpture in India was pretensions to be considered an example of architecture or art can be ascribed to a time earlier than that of Ashoka (circa 250 B.C.). In the pre-Ashoka art at the present day, wood was solely or almost solely employed. Even at the close of the 4th century, B.C., Megasthenes, the Greek Ambassador at the court of Chandragupta, grand-ruler of Ashoka, describes Pataliputra, the capital of the Indian monarch, as "surrounded by a wooden wall pierced with loop-holes for the discharge of arrows." If the capital itself was thus defended we can easily infer that the architecture of the period was wooden. And long after stone was introduced the little styles continued to be influenced by, or copied from, the wooden.

Monumental Pillars—The first class of works that we have to notice are the monumental pillars, known as *stupa*. The oldest are the monolithic columns of Ashoka, nearly thirty in number, of which ten bear his inscriptions. Of these the Lauriya-Nandangarh column in the Champaran District, India, is practically unfinished. The capital of each column, like the shaft, was monolithic, and comprised three members, viz., a Persopolitan bell, abacus, and crowning sculpture in the round. By far the best capital of Ashoka's time was that executed at Sarnath near Benares. The four lions standing back to back on the abacus are carved with extraordinary precision and accuracy. Of the post-Ashokan period one pillar (B.C. 150) stands to the north east of Benares in the Gwalior State, another in front of the cave of Karli (A.D. 70), and a third at Udayagiri and Khandagiri 20 miles from Guwahati, Assam, and Nalini in the Bomday Presidency, Bihar, and Ajanta in the Bombay District. The most important groups of caves are situated in Bhaja, Bedsa, Karli, and Ajanta. The most important groups of caves are situated in Bhaja, Bedsa, Karli, and Ajanta. The most important groups of caves are situated in Bhaja, Bedsa, Karli, and Ajanta.

Caves—Of the rock excavations which are one of the wonders of India, none-entirely belonging to Western India. The most important groups of caves are situated in Bhaja, Bedsa, Karli, and Ajanta. The most important groups of caves are situated in Bhaja, Bedsa, Karli, and Ajanta. The most important groups of caves are situated in Bhaja, Bedsa, Karli, and Ajanta.

aided, viz., the Buddhists, Hindus and Jainas. The earliest caves so far discovered are those of Barabar which were excavated by Ashoka and his grandson Dasaratha, and dedicated to Ajivikas, a naked sect founded by Makkhali Gosala. This refutes the theory that cave architecture was of Buddhist origin. The next earliest caves are those of Bhaja, Patakhora and Ajanta. But there is good reason to suppose from Dr. Marshall's recent researches and from epigraphical considerations that they are considerably more modern. The Buddhist caves are of two types—the *chaityas* or chapel caves and *viharas* or monasteries, for the residence of monks. The first are with vaulted roofs and horse-shoe shaped windows over the entrance and have interiors consisting of a nave and side aisles with a small *stupa* at the inner circular end. They are thus remarkably similar to Christian basilicas. The second class consist of a hall surrounded by a number of cells. In the later *chaityas* there was a sanctum in the centre of the back wall containing a large image of Buddha. Hardly a *chaitya* is found without one or more pillars adjoining it. Of the Hindu cave temples, not far from Wang Pao.

Temples—*Stupas*, known as *dagabas* in Ceylon and commonly called *stupas* in North India, were constructed either for the safe custody of relics hidden in a chamber often near the base or to mark the scene of notable events in Buddhist or Jain legends. Though we know that the ancient Jains built *stupas*, no specimen of Jain *stupas* is now extant. Of those belonging to the Buddhists, the great *Stupa* of Sanchi in Bhopal, is the most intact and entire of its class. It consists of a low circular drum supporting a hemispherical dome of less diameter than the drum. In an open passage for circum-

Methodorus is hereon called a *Bhagavata*, which shows that though a Greek he had become a Hindu and presumably a Vaishnava. Another inscription worth noting and especially in this connection is that of Cave No. 10 at Nasik. The donor of this cave, Ushavadata, who calls himself a Sakra and was an Indo-Scythian, himself spoke of as having granted three hundred thousand kine and sixteen villages to gods and Brahmins and as having annually paid one hundred thousand Brahmins. Here is another instance of a foreigner having embraced Hinduism. Thus for the political, social, economical and religious history of India at the different periods the inscriptions are in valuable records, and are the only light but for which we are 'fording and blind'.

Saracenic Architecture—This begins in India with the 13th century after the Persian manner of occupation of the Muhammadans. Their first mosques were constructed of the materials of Hindu and Jaina temples, and sometimes with comparatively slight alterations. The mosque called *Adhai-din-ka-jhonpra* at Ajmer and that near the Qutb Minar are instances of the Muhammadan architecture of India varied at different periods and under the various dynasties, imperial and local. The early Pathan architecture of Delhi was massive by and at the same time was characterised by elaborate richness of ornamentation. The Qutb Minar and tombs of Alauddin and Alauddin Khalil are typical examples. Of the Sharqi style we have three mosques in Jaunpur with several tombs. At Bandu in the Bihar State, a third form of Saracenic architecture sprang up, and we have here the Jam Masjid, Boshang, tomb, Jahaz Mahall and Hindola Mahall as the most notable instances of the secular and ecclesiastical styles of the Jalwa Pathans. The Muhammadans of Bengal again developed their own style, and Pandua, Malda, and Gaur became famous for the ruins of the buildings of this type, the importance of which are the Adina Masjid or Sikandar Shah, the Elahbi mosque, Kadama Masjid, and so forth. The Bahmani dynasty and Adomd their capitals with important buildings. The most striking of these is the great mosque of Gulbarga, which differs from all Muhammadan work in having the whole central area covered over so that what in others would be an open court is here roofed by sixteenth small domes. "Of the various forms which the Saracenic architecture assumed," says Lergusson, "that of Ahmedabad may probably be considered to be the most elegant." It is not for its carved stone work, and the work of the perforated stone windows in Sidi Sayyid's mosque, the carved niches of the minars of many other mosques the sculptured *abacus* and domed and paneled roofs is so acquired that it will rival anything of the sort executed elsewhere at any period. No other style is so essentially Hindu in complete conformity with this was the form of architecture employed by the Adil Shahi dynasty of Bijapur. There is here relatively little trace of Hindu form or details. The principal buildings now left at Bijapur are the Jam Masjid, Gagan Mahall, Mihar Mahall, Ibrahim Rauza and mosque and the Gol Gumbaz. The latter predecessor, the Pithans of Delhi, the Moghuls

were a great building race. Their style first began to evolve itself during the reign of Akbar in a combination of Hindu and Muhammadan features. Noteworthy among the emperor's buildings are the tomb of Humayun, and the palaces at Fatehpur, Gohri and Agra. Of Jehangir's time his mosque at Lahore and the tomb of Itimad-ud-daula are the most typical structures. "The force and originality of the style gave way under Shah Jahan to a delicate elegance and refinement of detail." And it was during his reign that the most splendid of the Moghul tombs, the Taj Mahal at Agra, the tomb of his wife Mumtaz Mahall, was constructed. The Jhot Masjid in Agra, Forts and another surpassingly pure and elegant monument of his time.

Archæological Department—As the Archæological monuments of India must attract the attention of all intelligent visitors, they would naturally feel desirous to know something of the Archæological Department. The work of this Department is primarily two-fold, conservation, and research and exploration. None but spasmodic efforts appear to have been made by Government in these directions till 1870 when they established the Archæological Survey of India and entrusted it to General (afterwards Sir) Alexander Cunningham, who was also the first Director-General of Archæology. The next advance was the initiation of the local surveys in Bombay and Madras three years after the work of these surveys, however, was restricted to antiquarian research and description of monuments, and the task of conserving old buildings was left to the faithful efforts of the local Governments often without expert guidance or control. It was only in 1878 that the Government of India under Lord Lytton took to this deplorable condition, and sanctioned a sum of 3 lakhs to the repair of monuments in United Provinces, and soon after appointed a conservator, Major Cole, who did useful work for three years. Then a reaction set in, and his post and that of the Director-General were abolished. The first systematic step towards reforming official responsibility in conservation matters was taken by Lord Curzon's Government, who established the seven Archæological Circles that now obtain, placed them on a permanent footing, and united them together under the control of a Director-General, provision being also made for subsidising local Governments out of imperial funds when necessary. The Ancient Monuments Preservation Act was passed for the protection of historic monuments and relics especially in private possession and also for State control over the excavation of ancient sites and tombs in antiquities. Under the direction of Dr J. H. Marshall, C.I.E., Director-General of Archæology, a comprehensive and systematic campaign of repair has been prosecuted, and the result of it is manifest in the present altered conditions of old buildings. One has only to see for example the Moghul buildings at Agra, Delhi, Lahore and Ajmer in order to be convinced how the work of careful reconstruction and repair has converted these decayed and desecrated monuments with their modern excellence into edifices of unrivalled loveliness. Another noteworthy feature of this work has been the rescue of many of the buildings from profane and sacrilegious uses. It is reg-

known that the superb Pearl Mosque of Jahangir in the Lahore Fort contained a Government treasure, and the Sleeping Hall of Shah Jahan served as a Church for the British troops. At Bijapur two mosques have been recovered, one of which was used as a Babington and the other as Post Office. The local Kutchi has now been expelled from the local mind of Sidrayid at Ahmedabad. The Cave temples at Taxila or Takshashila, the seat of the ancient Hindu University, and so forth.

Indian Art.

Within the last few years there has been a most interesting and promising, though some what narrowly confined, revival in Indian Art. For this, it is to be feared, scant credit is due to British educational policy in India, though the impetus has come mainly from a few British and other European enthusiasts who have reminded cultured India of the value of its ancient artistic heritage and indicated the possibilities of revival. Each year between 2,000 and 2,500 students pass the various examinations of the four Schools of Arts maintained by the State, but until very recently those institutions have been in some respects seriously mistaken in ideal and method. Regarding their work over half a century it may be said broadly that they have paid very inadequate attention to the traditions of Indian Art, and that in consciously or unconsciously encouraging Western influences, which the Indian student could not thoroughly assimilate, they have not even been particularly choosy good examples of Western art. Nor have the Schools of Arts been altogether free from the taint of commercialism, indeed, for some years one of them was in effect some-thing between an industrial workshop and an Emporium for selling Indian curiosities merely designed to meet the taste of tourists. In justice to the Schools it should be added that they have seldom been able to attract into their members of the hereditary craftsmen with this being unprofitable. Further, even for students who might attain to conspicuous skill, there have been few openings in after-life. All this is now changing, but the improvement began only some fifteen years ago, and it is mainly due to agencies more or less independent of the schools.

A Notable Revival.

The revival which has already produced one notable article, Mr. Abanindranath Tagore, is of the best periods of Indian art. In order to comprehend it, it is therefore necessary to glance back over the history of art in India. With sculpture we are here not particularly concerned, for there is no perceptible revival

in it at present, but it may be said in passing that its golden age in India was the period which produced the sculptures of Ellora and Elephanta, that in its finest examples this art was genuinely Indian, for the Gandhara sculptures, which show strong Greek influence, are inferior enough to make the contention that India owed much to Greece absurd, and that perhaps the finest Indian sculpture is to be found in Java, where at Borobudur, in the eighth and ninth centuries A.D. the descendants of mighty masterpieces. In regard to paintings, we begin with those at Ajanta produced at intervals between the first century before Christ and perhaps the seventh century of the Christian era. A typical example in which a mother and her child supplicating Buddha are presented not only with much technical skill but with tenderness of feeling, may be found reproduced in Griffiths' book on Ajanta and in Mr. Harrell's Indian Sculpture and Painting. These paintings are true treasures, differing in method from the Italian in little but the use of mechanical as well as chemical combination of colours. Practically all the work of this time has perished, and of the secular art of the period before the Moguls there is scanty record. With the Moguls for the first time painting became mainly secular. Whereas a Hindu philosopher had laid it down that it was unprofitable to represent natural objects when the aim was to make the artist's subject idealistic, the Moguls were of idolatry naturally capable to the development of secular painting. The Mogul artists were Persians or others moved by an art, and their followers of the Hindu or humble origin, whose work is finished, but it is said, and in colour often excellent. It was in the reign of Jahangir (1605-1627) that Mogul painting reached its highest point, and it is to that period that it is

Manners and Customs.

Next to the complexion of the people, which varies from fair to black, the tourists' attention in India is drawn by their dress and personal decoration. In its simplest form a Hindu's dress consists of a piece of cloth round the loins. Many wear nothing more, and he would dispense with even so much if the police allowed him to. The Mohammedan always covers his legs, generally with trousers sometimes with a piece of cloth tied round the waist and reaching to the ankles. Hill men and women, who at one time wore a few leaves before and behind and were totally innocent of clothing, do not appear to-day within the precincts of civilization and will not meet the tourists eye. Children either absolutely nude or with a piece of metal hanging from the waist in front, may be seen in the streets in the most advanced cities and in the homes of the rich. The child Arr-hna, with all the jewels on his person, is nude in his pictures and images.

Dress.—The next stage in the evolution of the Hindu dress brings the journey nearly down to the feet. On the Malabar coast, as in Burma the ends are left loose in front. In the greater part of India, they are tucked up behind—a fashion which is supposed to be the narrow, or one end is gathered up in folds before and the other tucked up behind. The simplest dress for the trunk is a scart thrown over the left shoulder, or round both the shoulder like a Roman toga. Under this garment is often worn a coat or a shirt. When an Indian appears in his full indigenous dress, he wears a long robe, reaching at least down to the calves. The sleeves may be wide or long and sometimes puckered from the wrist to the elbow. Before Europeans introduced buttons, a coat was fastened by ribbons, and the fashion is not obsolete. The Mohammedan prefers to button his coat to the left, the Hindu to the right. A shawl is tied round the waist over the long coat, and serves as a belt, in which one may carry money or a weapon. It allowed the greatest variety is shown in the head-dress. More than seventy shapes or caps, hats, and turbans may be seen in the city or Bombay in the Punjab and the United Provinces, in Bengal, in Burma and in Siam. Other varieties prevail. Cones and cylinders, domes and tunicated pyramids, high and low, with sides at different angles, ridged brims, projecting brims, long strips of cloth wound round the head or the cap in all possible ways, ingeniously combining perhaps in the "parrot" of the Maratha turban—all these fashions have been evolved by different communities and in different places, so that a trained eye can tell from the head covering whether the wearer is a Hindu, Mohammedan or Parsi, and whether he hails from Poona or Dharwar, Ahmedabad or Bhavnagar.

Fashion Variations.—Fashions often vary with climate and occupation. The Bombay fisherman may wear a short coat and a cap, and may carry a water in his pocket yet, as he must work for long hours in water, he would not cover his legs, but suspend only a coloured kerchief from his waist in front. The Pathan of the cold north-west affects loose baggy trousers, a tall head dress befitting his stature and covers his ears with its folds as if to keep off cold. The poorer people in Bengal and Madras do not cover their heads, except when they work in the sun or must appear respectable. Many well to do Indians wear European dress at the present day, or a compromise between the Indian and European costumes, notably the Indian Christians and Parsis. Most Parsis however have retained their own head-dress, and many have not borrowed the European collar and cuffs. The majority of the them wear gowns and scarfs over them. The vast majority of Mohammedan women are *goshas*, and their dress and persons are hidden by a veil when they appear in public a few converts from Hinduism have not borrowed the custom. In Northern India Hindu women have generally adopted the Musselman practice of seclusion. In the Dehlan and in Southern India they have not.

As a rule the hair is daily oiled, combed, parted in the middle or the head, plaited and rolled into a chignon, by most women. Among high caste Hindu widows something shawl, their heads in imitation of certain a caste, or monks and nuns. Hindu men do not, as a rule, completely shave their heads. Mohammedans in most cases do. The former generally remove the hair from a part or the head in front, over the temples, and near the neck, and grow it in the centre, the quantity grown depending upon the fancy of the individual. Nowadays many keep the hair cropped in the European fashion, which is also followed by Parsis and Indian Christians. Most Mohammedans grow beards, most Hindus do not, except in Bengal and elsewhere, where the Mohammedan influence was predominant in the past. Parsis and Christians follow their individual inclinations. Hindus are known as *Sathus* or *Mahatmas* as distinguished from *Sanyasis*, do not clip their hair, and generally coil the uncombed hair of the head into a curl, in imitation of the God Shiva.

Hindu women wear more ornaments than others of the corresponding grade in society. Ornaments beneath the head, the ear, the neck, the arms, wrists and by some until motherhood is attained, and by some the neck, the arms, wrists and by some ornaments beneath the head, the ear, the neck, the arms, wrists and by some. Each community affects its ornaments, though imitation is not rare. Serpents with several heads, and the lotus the rose, and the peacock are the most popular objects of representation in gold or silver.

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Minor Deities—The minor gods and goddesses and the divine heroes and heroines who fill the Hindu pantheon, and to whom shrines are erected and worship is offered, constituting a large part of the popular religion. Many of them enjoy a local reputation, and are unknown to several literatures, and are worshipped chiefly by the lower classes. Some of them, though not mentioned in ancient literature, are celebrated in the works of modern writers.

The dams in their temples, adorned the carved pillars which surrounded and developed their forms, and concentrate some of the deities common to Hindus. But their view of Divinity is different from the Hindu conception, and in the opinion of Hindu theologians they are atheists. So also the Buddhists of Burma pay almost the same veneration to Prince Siddhartha as if he was a god, and indeed elevate him above the Hindu gods, but from the Hindu standpoint they are also atheists.

Images—Indians invisible powers and deities personify the Hindu gods, and believed persons, the Hindus venerate certain animals, trees and inanimate objects. This veneration must have originated in gratitude, fear, wonder, and belief in spirits as the cause of all good or harm. Some of the animals are vehicles of certain gods and goddesses—the eagle of Vishnu the swan of Brahma the peacock of Saraswati. Hanuman, the monkey, and Rama, one serpent upholds the earth, another makes Vishnu's bed elephants support the ends of the universe, besides one such animal being Indra's vehicle the god of riches or wealth rides on a tiger, one of Vishnu's incarnations was partly man and partly lion. The cow is a useful animal to the Brahman vegetarian her milk is indispensable, and he who often subsisted on milk and roots and roots. To the agriculturist cattle are indispensable. The snake excites fear, stones, on which the image of a serpent is carved, may be worshipped. The snake after a hover or a creep takes a few names from the epics, Ravana means a woman after a dog and to name a snake, a snake, a parrot, or a strong a lion, or a small or tall, weak or strong a lion, or silver, gem, diamond, ruby, pearl, or merely than to call a man white, black, or red gold or silver. Nothing could be more natural to the birth of departed sages than popularity to this practice. Nothing could be more natural to the birth of departed sages than popularity to this practice.

Indian Names.

The personal name of most Hindus denotes a material object, colour, or quality, an animal, a relationship, or a deity. The uneducated man, who cannot correctly pronounce long Sanskrit words, is content to call his child, as the case may be, "This practice survives among the highest classes as well as the lowest, and hence the names of the seven heavenly bodies concerned. When they begin to assume the names of the Hindu deities, they practically enter upon a new stage of civilization. It is doubtful whether the Hindus ever venture to assume the names of the departed spirits worshipped by them. To pronounce the name of a devil is to invite him to do harm. It is a superstition sometimes bear the names of human beings, the reason seems to be that they were originally human.

White, and so does Arjuna. Krishna black Bhuma terrible Nakula a mongoose Shunaka a dog Shyama a parrot Shrugata a horn among the names prevalent at the present day. Hira is a diamond. Lakshmi or Lakshmi a jewel. Sonu or China gold. Vellu or Bellu, in the Dravidian languages, means white metal or silver. Men are often called after the days of the week on which they were born, and hence the names of the seven heavenly bodies concerned. When they begin to assume the names of the Hindu deities, they practically enter upon a new stage of civilization. It is doubtful whether the Hindus ever venture to assume the names of the departed spirits worshipped by them. To pronounce the name of a devil is to invite him to do harm. It is a superstition sometimes bear the names of human beings, the reason seems to be that they were originally human.

Domestic Life—Of the daily domestic life of the people a tourist cannot see much. He may see a marriage or funeral procession in which the Hindu dead body is generally carried on a few pieces of bamboo fastened together, a thin cloth is thrown over it and the body is tied to the frame. The Mohammedan burier is more decent, and resembles the Christian coffin. Some Hindus, however, carry the dead to the burial ground in a palanquin with great pomp and ceremony. The higher castes cremate the dead others bury them. Burial is also the custom of the Towers of Silence.

Worship—Without going into a temple, one can get a fair idea of image worship by seeing how a serpent stone is treated under a tree. It is washed, smeared with sandal, decorated with flowers food in a vessel is placed before it, lamps are waved, and the worshipper goes round it, and bows down his head, or prostrates himself before the image. In a temple larger bells are used than the small ones that are brought to such a place. Jewels are placed on the idol and the offerings are on a larger scale. Idols are carried in public procession in palanquins or cars. The lower classes sacrifice animals before their gods and goddesses.

High-caste practices—The high caste Hindu, on the other hand, believes that the more often the name of a deity is on his lips, the more merit he earns. Therefore the debel-

ately names his children after his gods and goddeesses, so that he may have the opportunity of pronouncing the holy names as frequently as possible. These are also notorious and picturesque Shiva is happy. Vishnu is a pederast Gowda is the cowherd Krishna Keshava has fine hair. Rama is a delightful first living being on the primeval waters. Ganesha is the Lord of Shiva's hosts. Dhanu is the luminary that makes the day. Subrahmanya is a brother of Ganesha. Sita is a virtuous Sati a ray of light Tara a star. Radha prosperity. Bhama of the glowing heart ornaments. Bhama of the glowing heart. Shiva and Vishnu has each got at least a thousand names, and they may be freely drawn upon and paraphrased in naming one's children, and the whole Hindu pantheon is as crowded as it is large. When a mother loses several children, she begins to suspect that some evil spirit has conspired against her and in order to make her offspring unattractive to the powers of darkness, she gives them ugly names, such as Kera, rubbish, or Urida, dunghill, or Martoba, the mortal. Women are named after rivers, as Saraswati, Ganga, Bhagtrathi, Goda-vari, or Kaveri, just as men are sometimes called after mountains. Many counsels young men not to choose a wife with such a name, perhaps because a river is an emblem of devousness and instability. But the names of rivers have not been discarded. The Burmans have a curious custom. If a child is born on a Monday, its name must be given with a guttural, on Tuesday with a palatal, on Thursday with a labial, on Saturday with a dental.

Family names—When a person rises in importance, he adds to his personal name a family or caste name. It was once the rule that the title Sharma might be added to a Brahman's name, Varma to a Kshatriya's, Gupta to a Vaisya's, and Das to a Shudra's. This rule is fairly well observed in the case of the last two titles, but the meaning of the other two has changed. Das means a slave or servant, and the proud Brahman cannot disdain to call himself the servant of some god. Thus, although Kallidas, the famous poet, was a Shudra, Ramadas, the famous guru of Shivaji, was a Brahmin. The Vaisya may have made this a fashion of calling one's servant or some god exceedingly popular, and in Western India high caste Hindus of this sort commonly add Das to their names. The Brahmans of Southern India add Shastri or Aiyangar to their names. Shastri, Acharya, Bhat, Bhattacharya, Pradhyaya, Mubhopadhyay, changed in Bengal into Mukherji, are among the titles indicative of the Brahmanical profession of studying and teaching the sacred books. Among warlike classes, like the Rajputs and Sikhs, the title Singh (lion) has become more popular than the ancient names brave and has the same force. Raja, changed into Maharaja and Bah was a political title, and is not confined to any caste. The Bengali family names, like Bose and Ghose, name when they are baptised.

Conversions—As a rule, a child is named soon after it is born, and in the case of males the appellation is not changed. The higher Hindu castes have a separate ceremony called the name-giving ceremony performed on the twelfth day after birth. When a girl is married in these castes, the husband's family give her a new personal name. When a boy is invested with the sacred thread and is made a twice-born, his name is not changed, but when a man joins an order of ascetics his lay name is dropped, and he assumes a new name. So also when a Burman joins an order of monks or nuns, the lay name is superseded by a Pali name. Christian converts change their original name when they are baptised.

Professional names—Tamil names sometimes denote a profession in some cases they might have been conferred by the old rulers. Alecta, Kulikarni, Deshpande, Chitnavis, Alah-naths are the names of officers held in former times. One family name may mean a flour seller, another a cane seller, and a third a liquor seller. To insert the father's name is between one's personal and the family name is a common practice in Western India. It is rare elsewhere. When a family comes from a certain place, the suffix 'kar' or 'wallah' is added to the name of the place and it makes a family surname in Western India. Thus we may have Chitpurnkars and Suratwallahs, or Malabars and Billimoras, as among Parsis. This Vasudev Pandurang's personal name is Vasudev, a Hindu, whose personal name is Vasudev, father's name Pandurang, and family name derived from the village of Chupin, is Chitpurnkar. In Southern India the village name precedes the personal name. The evolution of Muslim names follows the same lines as Hindu names. But Muslims have no god or goddeesses, and their names are derived from their religious and secular history. These names and titles are often appellations. The agnomenes Bakshi, Din, Ghulam, Khatwa, Rakht, Kazl, Munshi, Sheikh, Syed, Begum, Bibi and others, as well as honorific additions like Khan, have meanings which throw light of Muslim customs and institutions. The Parsis also have no gods and goddeesses, and their personal names are generally borrowed from their sacred and secular history. Their surnames frequently indicate a profession or a place, as in the case of Hindus in Western India. Bahlipah, Wellah, Headponey, Contractor, Sahibwallah, Adhwallah and others like these are tell-tale names.

Dut and Mitra, Sen and Gupta, end the one

to identify the caste of their bearers, because the caste of a family or clan cannot be changed. Shek, chief of a guild or a town, becomes Chetty, a Vaisya title, in Southern India. Mudaliyar and Nayudu, meaning leaders, are titles which were assumed by castes of political importance under native rulers. Nayr and Menon are the titles of important castes in Malabar. Ram, made to personal names in Northern India. Suthes like Ji, as in Ramji or Jansheji, the Kanarese Appa, the Telugu Gari, the feminine Bai or Devi, are honorific. Freely like Babu, Babu, Lala, Sodhi, Pandit, Raja, and the Burmese Mlung are also honorific.

Big Game Hunting.

... and ... will ... be found ...

Hunting grounds are to be found through- out the length and breadth of India. Mysore and Burma produce the finest lion, but these splendid animals, though strictly preserved, are to be found also in the forests of the Satpura Hills, that paradise of big game. The sports- man with a year at his disposal, provided he has suitable introductions and is prepared to work hard, should be able to secure specimens of most of the game animals of India. He might well begin in January in the Central Pro- vinces, where he would find black buck, gazelle, ibex, and a variety of small game in the open country, and where there should be no diffi- culty in securing some panthers and sloth bears, in the hills also he will find barking deer and four horned antelope, while tigers are not uncommon, and in another parts buffalo may be met with. About the middle of March the sportsman could go on to Kashmir, and find there brown and black bears, ibex, markhor and shapoo or ooral, before crossing into Tibet. He might be for- tunate enough to come across a stag that had not yet cast its antlers, and killing this, he could set his bag on the return journey towards the end of October, or in November. If he has more time at his disposal, Burma might well be visited, for there are found several species not to be obtained in India, such as the tigre, the brown antlered deer, and the Malayan bear, the brown antlered deer, and the Malayan bear, not to be obtained in India, such as the tigre, the brown antlered deer, and the Malayan bear, the brown antlered deer, and the Malayan bear.

It is not advisable to lay down the law as to rifle and equipment, but the sportsman may be recommended not to use small-bore rifles for dangerous game. A 500 cordite rifle should suffice for big game, and a small-bore rifle antelope and gazelle, while a 12-bore gun will be found most useful for feathered game. The regulations as to the importation, etc., of arms include in Bombay the following — A dealer in arms and ammunition intending to import the same into Bombay must first obtain from the Commissioner of Police a license on payment of Rs. 10. Arms and ammunition may be sold by dealers, to Europeans (ex- cluding Germans, Austrians and Turks), Anglo Indians (Burmese), Volunteers (not exempted under item 13, Schedule I, Indian Arms Act 1907), or in such quantities as Government may like, and for the personal use of the pur- chaser. During the war no dealer can sell arms or ammunition to any person without a license, to be obtained from the Commissioner of Police. Non-converged persons may be licensed by the Commissioner of Police to possess certain arms and ammunition only can possess such arms and ammunition. Exempted persons are mentioned in their license. Exempted persons may import arms and ammunition in reasonable quantities without a license, but the weapons, etc., must be declared before the Customs officer on duty.

... and ... will ... be found ...

... and ... will ... be found ...

Routes between India and Europe.

The Indian port for the direct journey to and from Europe is Bombay. There are a few sailings each way are direct. In other weeks a special steamer runs from Bombay to Aden where it connects with the Australian Homeward Mail and similarly, for the outward voyage, passengers and baggage and mails are transferred on alternate weeks to a steamer at Aden which proceeds thence direct to Bombay. The P & O carry the postal mails. The steamers call at Aden, Port Said, Malta, and Gibraltar. Passengers are not usually allowed to land at Aden but there is ordinarily time for them to spend some hours ashore at Port Said and Marseilles and a shorter time at Gibraltar. Passengers may travel westward from Port Said by any of the following methods—

By the liner to Marseilles, thence by special P & O express to Boulogne and so by Falmestone to London, or

By liner to Tilbury Dock

The arrangements for the eastward voyage are similar, in reverse order

Before the changes necessitated by the war, passengers could proceed homeward from Port Said by fast special steamer to Brindisi and thence onward by special or express train, or could continue from Port Said by liner and land at Plymouth. Both arrangements are now suspended

The P & O steamers run weekly from Bombay and London, leaving Bombay on Sunday and London on Saturday. Alternate sailings each way are direct. In some cases either by sea all the way or—and in some cases from the West via Bombay can be performed, lines of steamers by which the journey to and from Europe is Bombay. There are a few sailings each way are direct. In other weeks a special steamer runs from Bombay to Aden where it connects with the Australian Homeward Mail and similarly, for the outward voyage, passengers and baggage and mails are transferred on alternate weeks to a steamer at Aden which proceeds thence direct to Bombay. The P & O carry the postal mails. The steamers call at Aden, Port Said, Malta, and Gibraltar. Passengers are not usually allowed to land at Aden but there is ordinarily time for them to spend some hours ashore at Port Said and Marseilles and a shorter time at Gibraltar. Passengers may travel westward from Port Said by any of the following methods—

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The following are the Ticket rates from Bombay to Europe —

| From Bombay (or Karachi) | | Single Ticket | | Return Ticket (Valid 2 years) | |
|--|--|---------------|------------|-------------------------------|------------|
| | | 1st Saloon | 2nd Saloon | 1st Saloon | 2nd Saloon |
| To London by sea | To Marseilles, Malta, or Gibraltar | 900 Rs | 810 Rs | 990 Rs | 835 Rs |
| | ordinary rail ticket — | 840 | 750 | 990 | 945 |
| | To Marseilles and returning from London by sea | 942 | 852 | 1,085 | 950 |
| | To London via Marseilles, and including Special Express (rail and shipping car ticket) | 984 | 894 | 1,035 | 907-832-8 |
| | | 804 | 774 | 1,278 | 1,233 |
| | | 684 | 654 | 1,518 | 1,413 |
| Free tickets are issued to Karachi passengers by B I S N Co's steamers between Bombay and Karachi for either eastward or westward voyage. The transfer from the B I steamer to the P & O steamer, or vice-versa, is made in Bombay harbour by launch, without going ashore. The first saloon inside cabins on the main deck of the Mail steamers are let at a reduced rate | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| | | | | | |

Free tickets are issued to Karachi passengers by B I S N Co's steamers between Bombay and Karachi for either eastward or westward voyage. The transfer from the B I steamer to the P & O steamer, or vice-versa, is made in Bombay harbour by launch, without going ashore. The first saloon inside cabins on the main deck of the Mail steamers are let at a reduced rate

First Saloon passengers are allowed 3 cwt of personal baggage free of Freight, Second Saloon passengers and servants 1½ cwt each, Children over three and under 12 years of age half these weights, Ayahs and other native servants 1½ cwt each free

Anchor Line

The Anchor Line steamers run between Bombay and Liverpool and there are ordinarily two steamers each way per month. Westward bound steamers call at Marseilles, so that passengers can leave the ship there if they wish. Other calls are at Port Said and Gibraltar. Eastward bound steamers do not call at Marseilles. Free tickets by B I S N Co's steamers are issued to Anchor passengers to and from Bombay. The passage rates westward from Bombay are as follows —

| From Bombay (or Karachi) | | Single Ticket | | Return Ticket (valid 2 years) | |
|--------------------------------------|--------|---|--------|--------------------------------------|--------|
| Saloon | Native | Saloon | Native | Saloon | Native |
| Rs 555 | Rs 248 | Rs 900 | Rs 395 | Rs 1,433 | Rs 434 |
| Rs 630 | Rs 298 | Rs 1,000 | Rs 492 | Rs 1,433 | Rs 434 |
| "New York via Liverpool and Glasgow" | | "London via Liverpool and returning from Liverpool" | | "New York via Liverpool and Glasgow" | |
| Rs 867 | Rs 298 | Rs 1,000 | Rs 492 | Rs 1,433 | Rs 434 |

Some stowage are made home and via Genoa, fares by this route being, Single fare to Genoa, Rs 55 and to Glasgow, Rs 600. Passengers are allowed to take free of charge, 40 cubic feet of baggage, excess being charged at the rate of a shilling per cubic foot. Dogs are carried and the charge for them is Rs 50 per animal—arrangements must be made with the ship's butcher as to stowage.

The voyage Bombay to Liverpool occupies approximately 30 days. Bombay Agents W & A Graham & Co

Ellerman's "City" & "Hall" Lines

The City and Hall Liners sail westward for the most part from Karachi, via Bombay and passengers can go direct from one port and others direct from the other. They sail to Liverpool and passengers can be booked via Marseilles and Overland either Eastward or Westward. Most of the steamers have both first and second class accommodation. Others have one class only. Passengers booking their berths in Karachi for steamers sailing from Bombay are given free tickets from Karachi to Bombay by a British India S N Co's steamer. They are transferred immediately on arrival in Bombay to the Ellerman liner if she is sailing the same day, otherwise they are landed and at the same time informed as to when the steamer for Europe sails.

Adult 1st class passengers are allowed 3 cwt of luggage free, subject to a limit in measurement of 40 feet. Children and European servants travelling first class are allowed half that quantity. Children and native servants travelling 2nd class are allowed 60 lbs. Bicycles in crates or cases are specially charged for.

Fares from Karachi or Bombay —

| From Bombay or Karachi | | Single Ticket | | Return Ticket (valid 2 years) | |
|--|--------|--|--------|--|--------|
| 1st Saloon | Native | 1st Saloon | Native | 1st Saloon | Native |
| Rs 555 | Rs 420 | Rs 833 | Rs 248 | Rs 1,033 | Rs 298 |
| Rs 630 | Rs 480 | Rs 1,033 | Rs 298 | Rs 1,033 | Rs 298 |
| "Liverpool via Marseilles (with rail)" | | "Liverpool via Marseilles (with rail)" | | "Liverpool via Marseilles (with rail)" | |
| Rs 867 | Rs 298 | Rs 1,033 | Rs 298 | Rs 1,033 | Rs 298 |

Rubbattino

Monthly sailings from Bombay for Catania, Messina, Naples, Leghorn and Genoa, Messina ordinarily being reached on the 14th day, Naples on the 15th and Genoa on the 17th. The usual baggage allowances are made and baggage is conveyed free by sea from Port Said to London.

| FARES FROM BOMBAY | | | | | |
|---------------------------|--------|--------|----------------|--------|--------|
| Return
(valid 2 years) | Single | | | | |
| | First* | Second | Indian Servant | First* | Second |
| Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| 277-8 | 450 | 350 | 180 | 675 | 525 |
| | 427-8 | 325 | | 600 | |
| | 400 | | | 806 | 678 |
| | 300-8 | 427 | | 867 | 659 |
| | 546 | 417 | | | |

*Rs. 50 is charged for berth in a single berth cabin, Rs. 75 on a return ticket. The Messageries Maritimes and Maritime Italiana have a joint arrangement by which passengers taking return tickets may travel one way by one line and back by the other.

Natal Line

The steamers make their eastward voyages round South Africa Westward sailings from Bombay to Weymouth usually once a month during the season.

Fares, Bombay to Weymouth (25 days)—First class, Rs. 375 to Rs. 420, according to class of steamer and position of berth. Cheap first class tickets are issued for berths in 2-, 3-, and 4 berth cabins.

Bibby Line

Two (in the season, sometimes three) sailings monthly from Rangoon, via Colombo and Marseilles, to Liverpool. Fares from Rangoon and Colombo —

| Return | Single | | | | | |
|--------|-----------|--------------|--------------|----------------------------------|--------------|--------------|
| | 1st Class | From Colombo | From Rangoon | From Rangoon 4 months for | From Rangoon | From Colombo |
| | | | | 1st Class, available for 2 years | | |

| To Marseilles | Rs. | 575 | 550 | 900 | 1,050 | Rs. |
|--|-----|-----|-------|-------|-------|-----|
| | | | | | | |
| To London by sea returning from Liverpool | 625 | 575 | 1,000 | 1,100 | 875 | |
| To London via Marseilles | | | 1,025 | 1,120 | 925 | |
| To London by sea returning from Liverpool by sea | 650 | 625 | 1,050 | 1,200 | 975 | |
| To Marseilles returning from Liverpool by sea | | | 950 | 1,075 | 850 | |
| To London by sea returning from Marseilles | | | | 1,075 | 850 | |

Free 1st class tickets, 1st class—Colombo are given to passengers from South India.

Orient Line

Fortnightly sailings (Australian Mail) on Thursdays from Colombo to Port Said, Naples, Marseilles, Plymouth and London (Passes from Colombo —

| | 1st Saloon | 2nd Saloon | Native Servants | from Colombo to | |
|-------|------------|------------|-----------------|-----------------|---------|
| | Single | Return | Single | Return | 2 years |
| Rs | Rs | Rs | Rs | Rs | Rs |
| 600 | 600 | 600 | 600 | 600 | 600 |
| 660 | 660 | 660 | 660 | 660 | 660 |
| 720 | 720 | 720 | 720 | 720 | 720 |
| 840 | 840 | 840 | 840 | 840 | 840 |
| 900 | 900 | 900 | 900 | 900 | 900 |
| 960 | 960 | 960 | 960 | 960 | 960 |
| 1,080 | 1,080 | 1,080 | 1,080 | 1,080 | 1,080 |
| 1,170 | 1,170 | 1,170 | 1,170 | 1,170 | 1,170 |
| 1,350 | 1,350 | 1,350 | 1,350 | 1,350 | 1,350 |
| 1,425 | 1,425 | 1,425 | 1,425 | 1,425 | 1,425 |
| 1,575 | 1,575 | 1,575 | 1,575 | 1,575 | 1,575 |
| 1,750 | 1,750 | 1,750 | 1,750 | 1,750 | 1,750 |
| 1,875 | 1,875 | 1,875 | 1,875 | 1,875 | 1,875 |
| 2,025 | 2,025 | 2,025 | 2,025 | 2,025 | 2,025 |
| 2,250 | 2,250 | 2,250 | 2,250 | 2,250 | 2,250 |
| 2,400 | 2,400 | 2,400 | 2,400 | 2,400 | 2,400 |
| 2,600 | 2,600 | 2,600 | 2,600 | 2,600 | 2,600 |

Concessions for tickets, Talaimannar—Colombo, are given to South India passengers. Tickets are issued for native servants.

It used to be possible to obtain cheap passages, eastward or westward, in cargo ("tramp") steamers. These are now next to impossible to secure, because as the steamers are not licensed to carry passengers, passengers have to sign on as members of the crew, and the recent extension of the Employers' Liability Act then involves the ship's owners in liability to compensation to them for a variety of causes.

Indian Train Service

The distances and railway fares from Bombay to the principal centres of other parts of India are as follow —

| Miles | 1st Class | 2nd Class |
|-------|-----------|-----------|
|-------|-----------|-----------|

Delhi, B B & C.I. Railway, via new Nagda-Muttra direct route

Delhi, G I P Railway, via Agra

967
(28 hours)

1,187

Simla, via Delhi

Calcutta, G I P from Bombay, via Jubbulpore & Allahabad

Calcutta, G I P from Bombay, via Nagpur

Madras, G I P from Bombay, via Raichur

Lahore, via Delhi

1,162

91 2

68 6

34 4

45 91

99 1

103 5

52 11

33 3

33 3

Rs 2

Rs 2

Rs 2

Rs 2

Rs 2

THE SUEZ CANAL

The annual report of the Suez Canal Company published in July 1915 states that during the year the number of ships passed through the Canal was 4,802, the net tonnage for the year showing a decrease of 624,389 tons as compared with that of 1913.

The reduction of the transit dues to 6 25 fr per ton from the 1st January, 1913, together with the reduction of tonnage, had the effect of reducing the gross receipts, which amounted in 1914 to 122,248,858 fr, as compared with 120,650,934 fr in 1913, and 130,422,831 fr in 1912.

During the first seven months of 1914, the traffic through the Canal was in excess of that in 1914, remained practically stationary as compared with the preceding year.

Below are shown the 12 principal users in point of tonnage, of which six were British, three (in spite of the war) were German, two were Dutch, and one was French. Premier place, which in 1913, was held by the Ellerman Lines, is now given to the Peninsular and Oriental India combination, though actually the fusion between these two companies only took effect in October 1914 —

| Owners | Tonnage | Voyages |
|---|-----------|---------|
| Peninsular and Oriental | 12,29,000 | 465 |
| British India | 970,000 | |
| Ellerman Lines — | 625,000 | |
| Hill Line | 367,000 | |
| City Line | 341,000 | 302 |
| Duckwall Lines | 56,000 | |
| Others | 1,389,000 | |
| Wired Holt & Co, (Ocean and China Mutual) | 1,159,000 | 241 |
| Ilansa Line | 642,000 | 156 |
| Nederland and Stoomvaart Maatschappij | 631,000 | 136 |
| Neergrates Maritimes | 590,000 | 163 |
| Rotterdam Lloyd | 564,000 | 140 |
| Hambrug Amerika | 537,000 | 120 |
| Cyzer, Irvine, and Co | 480,000 | 140 |
| Norddeutscher Lloyd | 424,000 | 70 |
| T and J Harrison | 403,000 | 82 |
| Orient | 338,000 | 46 |

1915, the maximum draught of water

The maximum permissible draught of ships using the Canal was 31 feet in 1870, in 1890

has been at the average rate of about 1 foot every 2 years, thus bringing the maximum

The scheme of improvement adopted by the Company on the recommendation of the Inter-

William Matthews and Mr. Anthony Lister, is

It is not clear that the

of the Canal is to offer a slightly greater depth of water than that available in ports east of

low tide has a greater depth of water than that

work in hand should meet the needs of any ship likely to be built for the eastern trade.

When the Canal was opened in 1869 the width

8 inches had been increased to a minimum of 12 inches over a length of about 50 miles.

about 20 miles away. The latest scheme makes provision for a depth of 10 feet throughout

plate number of slings in the north and central

requirements of the immediate future

...and presents no special difficulty on the engineering side. A good deal of sand is occasionally

extension of the west breakwater by about

in hand for the past two years, is making satis-
factory progress. The Suez Roads are being

Agreement between the Applicant and the Company

...the following:

Some of these vessels were detained by the

templated hostile acts, others, though per-

their intention to use the ports of the Canal merely as ports of refuge, a measure which is

"His Majesty's Government do not admit that

implies any right to make use of the Canal and its ports of access for an indefinite time to

၁၃၇၂ ခုနှစ် ဇူလိုင်လ ၁၅ ရက်နေ့တွင် ပုသိမ်မြို့တွင် နေထိုင်သူ
 ၁၃၇၂ ခုနှစ် ဇူလိုင်လ ၁၅ ရက်နေ့တွင် ပုသိမ်မြို့တွင် နေထိုင်သူ

Government are fully justified in the steps

enough in the Canal ports to show clearly that they have no intention of departing in the

consistent with the use of the Canal in the ordi-

Canal Rates—Speaking at the annual meeting of the P & O Company in December

The advance of the Suez Canal Company's receipts had been checked by the war for

the reduction in unemployment, and the

maintained at the 1914 rate by wiping out the

company proposed to raise their capital by 50
percent from April 1 next to June 1, 1925

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Travel in India.

Specimen Tours

A number of specimen tours in India are given below. They are taken from one of the publications of those Cook and Son, from whom further information may be obtained. The traveller

the ancient Moslem capital of the Province, containing fine examples of Mahomedans and famous Jain temples of Dwarka, and on the Ajmer, Jaipur and Agra. The other, by the Great Indian Peninsula Railway carries the tourist over the Western Ghats by a superb mountain railway to Gwalior, whose rock fortresses rise like a giant battlement upon the plain, and so on to Agra. Of the glorious of the Raj Mahal, Agra Fort, and the deserted city of Fatehpur Sikri! It were supererogatory to speak of another easy stage leads to Delhi, that amazing collection of cities, dominated by the little Ridge where British valour kept the mutinous hordes at bay, and finally drove them from the city by a feat of arms unsurpassed in history. Then from Delhi the last Indian line leads comfortably to Benares, Lucknow and Calcutta, with the opportunity of an excursion to Cawnpore, if the spirit moves. The great charm of the Grand Tour is that it reveals the best that India can show. This route has the additional advantage that it fits in with any digressions which the time and purse of the traveller may permit. No one who can spare the time should fail to push northwards from Delhi to Peshawar, where the power of the army keeps watch and ward over the Khyber, and up the dread Pass to the cyclone where the fort of Ali Masjid bars the way to all invaders. Calcutta is the best starting point for Darjeeling, though unfortunately the magnificent mountain panorama visible from there is often obscured at this season by mists. Then from Calcutta the natives open a fine service of mail steamers leads to Burma and one of the unforgettable memories of the East is a voyage down the Irrawaddy from Bhamo or Mandalay to Rangoon. Again either direct from Calcutta, or via Burma, is an easy route to Madras, and by way of Madras and Trincomopoly, with their peerless Hindu temples back to Bombay, or on through Tuticorin to Colombo. But indeed the possibilities of expanding this tour are endless. Bombay is the best centre for the rock temples of Elephanta, Kanheri, Karli, Ellora and Ajanti. Calcutta is only a short distance from Puri, the one Indian temple remarkable Hindu temple in the country. From Calcutta also start the river steamers which thread the steamy plains of Bengal and run to the tea gardens of Assam.

The Grand Tour—People coming to India for the first time so often ask—“Where shall I go?” Well, wherever else the tourist may go, whatever else he should leave out, he should follow the beaten track, but the visitor who shuns any part of the orthodox journey across India misses what nothing else can repay. Bombay is by far the most convenient point of departure, for here “the world and steamers wait,” here is one of the finest cities in the British Empire, and here the traveller can best complete his outfit and arrangements. From Bombay stretch northwards the two great trunk lines of India. One, the Bombay, Baroda and Central India Railway, leads through the pleasant garden of Gujarat to Ahmedabad,

the touring season, which extends from November to March, there is the attraction of a perfect climate. It is never very hot, in the North indeed it is really cool. It is always fine and fresh and bracing. If there is one country in the world to which that elusive term applies, here we have at the season when the tourist arrives the real “Indian summer.” Then there is its infinite variety. India is in no sense a nation and never will be. Its peoples are wide as the Poles asunder, each has its own art, its own architecture, its own customs and its own civilisation. A certain superficial resemblance runs through each, beneath lies a never-ending variety which age cannot wither nor custom stale.

Twenty years ago, a tour in India was possible only to the wealthy, the leisured and those who had friends in the country. The cost of the journey was very high, the methods of transportation were very slow, and the facilities for travel were so indifferent that it was a bold man who consigned himself to the mercies of the country without a sheet of letters of introduction. Now the mail which in peace reaches Bombay in thirteen and a half days, and the passenger can travel by the same route and with the same speed as the mail. A dozen lines have covered the sea route between Europe and India and Ceylon with a pluck of regular services. The Indian Railways provide facilities on the trunk lines unsurpassed by the *trans-de-lux* of Europe, and the Indian hotel has grown into a really comfortable caravan-serai.

| 2nd Class | 1st Class | Rate | Remarks |
|-----------|-----------|--------|-----------------------------------|
| 1st Class | 2nd Class | 100 15 | From Bombay to Colombo |
| 1st Class | 2nd Class | 100 15 | From Colombo to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Calcutta |
| 1st Class | 2nd Class | 100 15 | From Calcutta to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Rangoon |
| 1st Class | 2nd Class | 100 15 | From Rangoon to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Dacca |
| 1st Class | 2nd Class | 100 15 | From Dacca to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Madras |
| 1st Class | 2nd Class | 100 15 | From Madras to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Pondicherry |
| 1st Class | 2nd Class | 100 15 | From Pondicherry to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Cochin |
| 1st Class | 2nd Class | 100 15 | From Cochin to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Bhatkal |
| 1st Class | 2nd Class | 100 15 | From Bhatkal to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Mangalore |
| 1st Class | 2nd Class | 100 15 | From Mangalore to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Cannanore |
| 1st Class | 2nd Class | 100 15 | From Cannanore to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Kollam |
| 1st Class | 2nd Class | 100 15 | From Kollam to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Thiruvananthapuram |
| 1st Class | 2nd Class | 100 15 | From Thiruvananthapuram to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Tutukuchi |
| 1st Class | 2nd Class | 100 15 | From Tutukuchi to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Kavaratti |
| 1st Class | 2nd Class | 100 15 | From Kavaratti to Bombay |
| 1st Class | 2nd Class | 100 15 | From Bombay to Lakshadweep |
| 1st Class | 2nd Class | 100 15 | From Lakshadweep to Bombay |

| 2nd Class | 1st Class | Steamer |
|-----------|-----------|---------|
| Rs 11 | Rs 22 | |

| Rs 2 | Rs 1 | From Calcutta to Bombay |
|-------|--------|---|
| 71 10 | 143 1 | Tour IX—From Calcutta via Benares, Lucknow, Cawnpore, Tunda, Agra, Delhi, Rewari, Jaipur, Ajmer (for Udaipur), Abu Road (for Ahmedabad and Baroda to Bombay) |
| 67 0 | 133 14 | Tour X—From Calcutta via Benares, Moghal Seral, Cawnpore, Tunda, Agra, Delhi, Rewari, Jaipur, Ajmer (for Udaipur), Abu Road (for Ahmedabad and Baroda to Bombay) |
| 50 2 | 118 3 | Tour XI—From Calcutta via Benares, Moghal Seral, Cawnpore, Tunda, Agra, Gwalior and Itarsi to Bombay |
| 60 14 | 133 8 | Tour XII—From Calcutta via Benares, Moghal Seral, Cawnpore, Delhi, Multra, Agra, Gwalior and Itarsi to Bombay |
| 83 13 | 167 7 | Extensions, Via Southern India to Colombo
Tour XIII—From Calcutta via Benares, Lucknow, Cawnpore, Tunda, Agra, Bandikui, Jaipur, Delhi, and Allahabad to Calcutta |
| 62 10 | 130 7 | Extensions, Via Southern India to Colombo
Tour XIV—From Bombay via Poona, Hyderabad, Wadi, Ratcliff, Madras, Tanjore, Trichinopoly, Madura, Dammashkodi, and Talal-mannar to Colombo |
| 58 8 | 122 7 | Extensions to above Tours
Tour XV—From Bombay via Poona, Hyderabad, Wadi, Guntakal, Bangalore, Erode, Trichinopoly, Madura, Dammashkodi, and Talal-mannar to Colombo |
| 15 10 | 31 5 | From Ajmer to Udaipur and return
From Abu Road to Mount Abu and return, one seat in Tonga (This excursion is strongly recommended, the scenery being very beautiful) |
| 20 15 | 41 13 | From Delhi via Bhatinda, Ferozepore to Lahore, returning via Amritsar |
| 20 15 | 41 13 | Umballa to Delhi
From Calcutta to Darjeeling and return (14 days) |
| 20 15 | 41 13 | From Kurda Road to Puri (Jagganath and return) |

(All fares subject to change without previous notice)

An Indian Glossary.

| | |
|---|--|
| ABKARI—Excise of liquors and drugs | BAHUT—A common thorny tree, the bark of which is used for tanning, ACACIA ARABICA |
| ADVI—A comprehensive account of India, under the Mughal Emperor Akbar, (compiled in 1590 by Abul Fazi) | BAHAR—A Hindu religious mendicant |
| ADVI—A subordinate executive official under the British rule. In Sind the name is still applied to Hindus of the clerical class | BAHAR—The bulbous millet, a common food grain, DEKASESTRA TYPHLOIDEUM, syn canbu, Madras |
| ADVI—A dam or weir across a river for irrigation purposes, Southern India | BAHAR—A dam or embankment (Bund) |
| ADVI—The early rice crop, Bengal, syn Ahu, Assam | BAHAR—A species of fig-tree, FICUS INDICA |
| ADVI—An inscription or Vishnu | BAHAR—(1) A village, or collection of huts, (2) A Jain temple, Kanara |

[illegible]

DABOHA—The title of officials in various

Jail Departments

DEBOTTAR—Land assigned for the upkeep

DEODAR — A CEDAR, CEDRUS LIBANI OF C

head of a District in non-regulation areas cor-

DEPUTY MAGISTRATE AND COLLECTOR—A

equivalent to Extra Assistant Commissioner

(Maratha) rule

plateau of the Deccan above the Ghats

DEVA—A deity

NAME SALMON COLORED POWERS USED FOR DYEING, and also producing a fine, soft, and pleasant Bessal.

DIARYSALA—A charitable institution pro-

DATA—A stupelying drug, DATA

DHENKRI—Name in Northern India for the

DISTRICT—The most important adminis-

Division—(1) A group of districts for ad-

ponding with a (revenue) District, (3) the area-

Minister of the Public Works Department

Divani—Civil, especially revenue, adminis-

Do 05—The tract between two rivers, espe-

ПОДПИСАНИЕ

Dux—A valley, Northern India

TRKA—A small two-wheeled conveyance drawn by a pony, Northern India

FAIRFAX INSURANCE GRANT—An annual pro-

[illegible]

FLATJARDARI—Under native rule, the area under

FINANCIAL COMMISSIONER—The chief con-

GADBI, Gad!—The cushion or throne of

Stimulated female hemp plant, *CANNABIS SATIVA*,

1. после ранней буквальной записи в м — каждой

WOLF CREST-UNION AIR NO DAMAGE-NO 'SITY

(the bathing steps on the bank of a tank,

and on the condition of guarding the

GINGERLYT—An oilseed, SESAMUM INDICUM,

the great temple gateways in Southern India

JOHN—LITTLE, ANDREW, and GUNTER

Costa Rica - National Institute of Statistics, 1990

to be paid

1948-1949

GUR, GooF—Crude sugar, syn jaggery, south-

ORAL

HAKIM—A native doctor practising the

to whom everything is law

HITS—A kind of fish, CLUPEA PISKA

HTI—An iron pinnacle placed on a pagoda
Burma

- Barman** — A native stream, sallow, art-
 brian or tent pitcher
Barman — The 'pure' (1) Applied espec-
 ally to the Sikhs, the word 'Barman'
 (-) and directly under Government is op-
 ed to find all related to officers etc, Nor-
Barman — A gravelly poor soil, Bombay
Barman — The harvest reaped in late autumn
 by a special, in Government hands
 like the harvest, the manager of a Govern-
Barman — Local flocks of foot soldiers,
 at night
Barman — A grass with scented
 root used for making screens which are
 put in doors and kept wet to cool a
 room by evaporation (Barman, Barman)
Barman — A stockade into which
 wild elephants are driven also applied to
 the operations for catching
Barman — A robe of honour
Barman — The weekly price for 'Mho-
 m' in a rural and for the reigning sove-
 reign in particular
Barman — Silk textiles broad-
Barman — The implement like a hoe or
 mallet, in common use for digging, syn-
Barman — A variable measure of distance,
 usually estimated at about two miles. The
 difference between the two miles or miles
 on the 'Mho' Imperial road averages a little
 over 2 miles, 1 furlong, 150 yards
Barman — A large house
Barman — The head of the police in a town,
 under native rule. The term is still used in
 Hyderabad and other parts of India
Barman — The chief police station in a
 head quarters town
Barman — A village accountant, Bombay,
 Decan, syn putwat
Barman — A Buddhist monastery, which
 always contains a school, Burma
Barman — A hundred thousand
Barman — The representative of the co-
 shiers in a zamindari village, Northern India
Barman — A common snake, Bur-
Barman — A mountain
Barman — A road of mounds near the skirts
 of a hill, especially in India
Barman — A class of writer, Bombay
Barman — The debt, that evidence is
 collected, in the sum of the good and evil
 action, in the evidence
Barman — A village accountant, Madras,
 syn, Barman
Barman — Under British rule,
 the 'Barman' is in the 'Barman' and
 powers conferred by law
- Barman** — A school especially one for the
 higher instruction of Mahomedans
Barman — A native merchant
 or

- AMARAT**—(1) formerly a considerable tract of country, (2) now a village or part of a village for which a separate agreement is taken for the payment of land revenue, (3) a department of revenue, *eg* right to catch elephants, or to take stone
- AMARATKARI**—A subordinate revenue official, Bombay
- AMANT**—The head of a Hindu conventual establishment
- AMARAVATI**—A title borne by Hindus, running above Rajah
- AMARER**, mahashir—A large carp, BARBUS tor (lit. 'the big-headed')
- AMBA**—A tree, *BASSIA LATROIA*, producing flowers used (when dried) as food or for distilling liquor, and seeds which furnish oil
- AMADAN**—An open space of level ground, the park at Calcutta
- AMOR WORKS**—Irrigation works for which separate accounts are kept of capital, revenue, and interest
- AMARTAB**—An elementary Mahomedan school
- AMARTAB** (revenue payer)—(1) The term applied in the Central Provinces to a co-sharer in a village held in ordinary proprietary tenure (2) a cultivator in the Chamba State
- AMARTAB**—The officer in charge of a taluka, Bombay, whose duties are both executive and magisterial, *syn* tahasildar
- AMADAR**, or mandapam—A porch or pillared hall, especially of a temple
- AMAKHOR**—A wild goat in North Western India, *CAPRA FALCONERI*
- AMASUD**—A mosque Jamma Masjid, the principal mosque in a town, where worshippers collect on Fridays
- AMASAD**—Seat of state or throne, Mahomedan, *syn* gaddi
- AMAR**—A Hindu shrine or conventual establishment
- AMARTAVI**—A person learned in Muhammadan law
- AMAR**—Sanskrit term for delusion
- AMAR**—A religious festival or fair
- AMINAB**—The niche in the centre of the western wall of a mosque
- AMINAB**—Steps in a mosque, used as a pulpit
- AMINAB**—A pillar or tower
- AMOR WORKS**—Irrigation works for which regular accounts are not kept, except, in some cases, of capital
- AMOSOO**—Lit. 'season', but generally applied to the rainy season, or to the regular moisture laden current of air prevailing at certain seasons
- AMUSSAL**, mousal—The outlying parts of a district, province or Presidency, as distinguished from the head-quarters (*sadr*)
- AMADADAR**, mucedadam—A representative or headman
- AMARTAB** (corruptly mubhtar)—A class of legal practitioners
- AMARTAB**—A leader, hence (1) a local chieftain, in Southern India, (2) a native officer of the lowest rank (corporal) in the Indian army
- AMAR**—A demon or spirit, Burma
- AMAR**—A title borne by Muslims, corresponding roughly to that of Rajas among Hindus
- AMAR**, nazarana—A due paid on succession or on certain ceremonial occasions
- AMART ASSAYS**—(1) In Northern India, the rent or share of the gross produce of land taken by the landlord, (2) in Madras and Lower Burma, the difference between the assumed value of the crop and the estimate of its cost of production
- AMAR**—Broad type woven across bedsteads instead of iron slats
- AMAR**—Pressed fish or salted fish paste, largely made and consumed in Burma
- AMAR**—An antelope, *BOSCAPRUS TRAGO-CAMERUS*
- AMAR**, neem—A tree, *ALBIS AZDIRAOMITA*, the berries of which are used in dyeing
- AMAR**—A title borne by the ruler of Hyderabad State
- AMARTAB**—A sub-division of a Native State, corresponding to a British District, chiefly in the Punjab and Bhopal
- AMAR COGNISABLE**—An offence for which the culprit cannot be arrested by the police without a warrant
- AMAR-OCCUPANCY TENANTS**—A class of tenants with few statutory rights, except in Oudh, beyond the terms in their leases or agreements
- AMAR-REGULATION**—A term formerly applied to certain Provinces to show that the regulations of full code of legislation was not in force in them
- AMAR**—A raving, watercourse, or drain
- AMAR**—A class of tenants with special rights in Central Provinces, in United Provinces
- AMAR**—Unhusked rice
- AMAR**—A troop of horses among the Marathas
- AMAR**—A tracker of strayed or stolen animals
- AMAR**—A tenant in Hyderabad State
- AMAR**—(1) A foot soldier, (2) in Assam formerly applied to every tree made above sixteen years
- AMAR**—A palanquin or litter
- AMAR**—The betel vine, FIRE BETEL.

STRA or TOPE—A Buddhist tumulus, usually of brick or stone, and more or less hemispherical, containing relics

STAN—(1) A province under Alahomedan rule, (2) the officer in charge of a large tract in Baroda, corresponding to the Collector of a British District, (3) a group of Districts or Division, Hyderabad

SUBAHAR—(1) The governor of a province under Alahomedan rule, (2) a native infantry officer in the Indian Army, (3) an official in Hyderabad corresponding to the Commissioner in British territory

SUB DIVISION—A portion of a District in charge of a junior officer of the Indian Civil Service or a Deputy Collector

SUPERINTENDENT—(1) The chief police officer in a District, (2) the official in charge of a hill station, (3) the official, usually of the Indian Medical Service, in charge of a Central Jail

STEE, SALS—A groom

TAHSEIL—A revenue sub-division of a District, syn taluka, Bombay, taluka, Aladras and Mysore, townshipp, Burma

TAHSEILDAR—The officer in charge of a tahsil, syn Alahattar, Bombay, townshipp officer or mayo oh, Burma mukhtiarak, Sind, validat, Baroda His duties are both executive and magisterial

TAHSEIL—Loms made to agriculturists for seed, bullocks, or agricultural improvements, syn tagal, Bombay

TAHVI—A village accountant, Gujarat, syn patwar

TAVALY, or talao—A lake or tank

TALUK, taluka—The estate of a talukdar in Oudh A revenue sub-division of a District, in Bombay, Aladras and Mysore, syn tahsil

TALUKAR—A landholder with peculiar tenures in different parts of India (1) An official in the Hyderabad State, corresponding to the Magistrate and Collector (First Talukdar) or Deputy Magistrates and Collectors (Second and Third Talukdars), (2) a landholder with a peculiar form of tenure in Gujarat

TALUK—In Southern, Western, and Central India, a lake formed by damming up a valley, in Northern India, an excavation holding water

TARV—A moist swampy tract, the term is specially applied to the tract along the foot of the Himalayas

TART, toddy, The sap of the date, palmyra, or cocoon palm, used as a drink, either fresh or after fermentation In Northern India the juice of the rice is called sardul

TASAV, tussore—Wild silkworms, *ANTHERA PAPAV*, also applied to the cloth made from their silk

TAVIA—Lath and paper models of the tombs of Hassan and Husain, carried in procession at the Muharram festival, syn tabut

TEAR—A valuable timber tree in Southern and Western India and Burma, *TECTONA* *ALYBIS*

TELEGRAPHIC TRANSMISSIONS—See Council bills

TEAR, thuggee—Robbery after straggulation of the victim

TEAKUR—(1) The modern equivalent of the caste name *Kshatriya* in some parts of Northern India, (2) a title of respect applied to Brahmins, (3) a petty chief, (4) a hill tribe in the Western Ghats

THAKUR—The brow-antlered deer, Burma, *CERVUS ELDI*

THANA—A police station, and hence the circle attached to it

THAKA—(1) Ceremonial anointment on the forehead, (2) vaccination

THAKA—An oilseed, *SESAMUM INDICUM*, also known as gingelly in Aladras

THAKA, tandel—A foreman, subordinate officer of a ship

TOLA—A weight equivalent to 180 grains (troy)

TSINE—Wild cattle found in Burma and to the southward, *BOS SODAPAVS*, syn hising and banteng

UNIT—A term in finance administration, denoting one person relieved for one day

URIAL—A wild sheep in North-Western India, *OVIS VIGNEI*

USAR—Soll made barren by saline efflorescence, Northern India

VAINTYADAR—Officer in charge of a revenue sub-division, with both executive and magisterial functions, Baroda, syn tahsildar

VAID or vaidya, Bengal—A native doctor practising the Hindu system of medicine

VAIK—(1) A class of legal practitioners, (2) an agent generally

VIHARA—A Buddhist monastery

VILLAGE—Usually applied to a certain area demarcated by survey, corresponding roughly to the English parish

VILLAGE UNION—An area in which local affairs are administered by a small committee

WARE—A Muhammadan religious or charitable endowment

WAZIR—The chief minister at a Muhammadan court

WEIR RATE—The rate of revenue for land assessed on irrigation

YOGI—A Hindu ascetic

YUNANI—Lit Greek, the system of medicine practised by Alahomedans

ZAMINDAR—A landholder

ZAMINDARI—(1) An estate, (2) the rights of a landholder, zamindar, (3) the system of tenure in which land revenue is imposed on an individual or community occupying the position of a landlord

ZAMANA—The women's quarters in a house, hence private education of women

ZIRAT—A Muhammadan shrine, North-Western Frontier

ZILA—A District

The
Admiral and his
Admiral

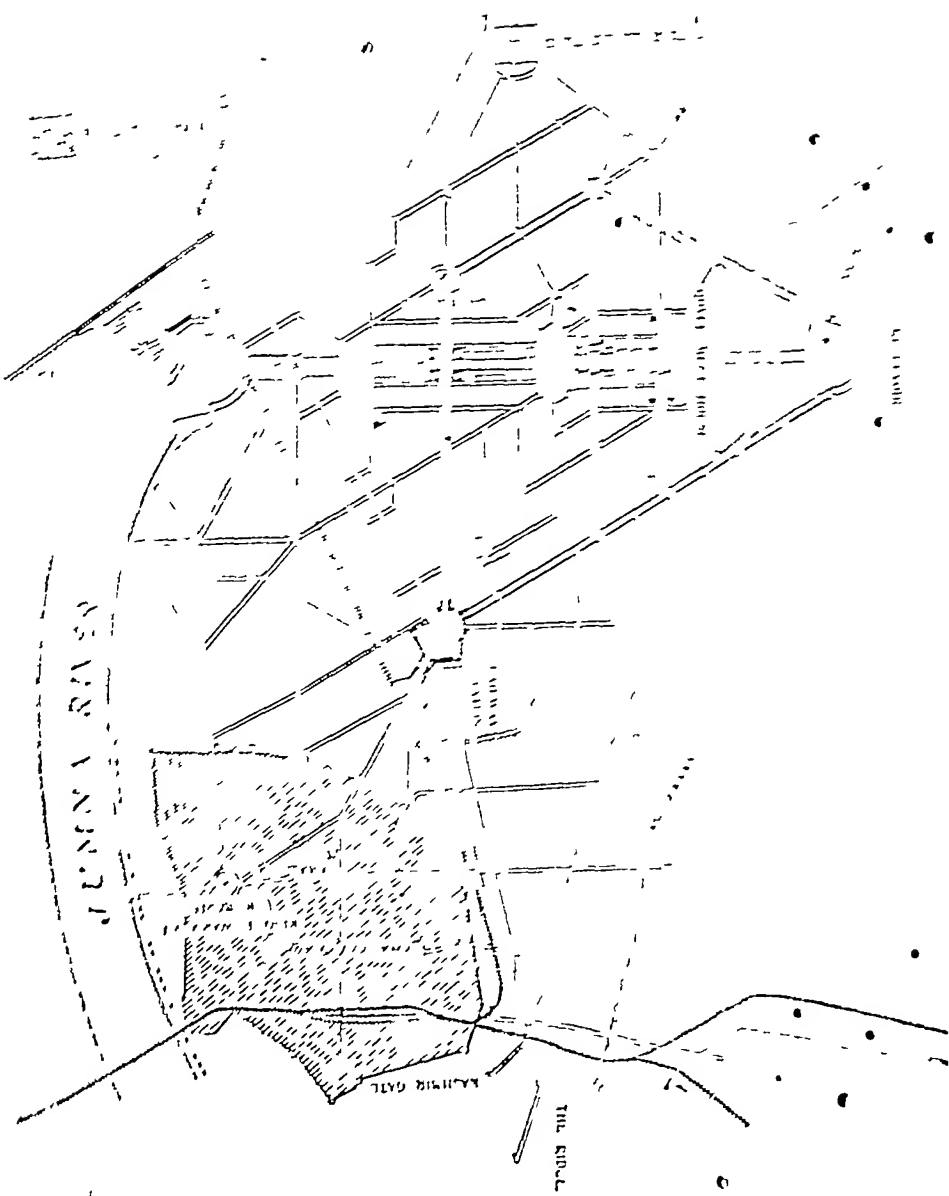
[illegible]

(The following text is extremely faint and largely illegible due to low contrast and scan quality. It appears to be a list or index of items, possibly related to the "Bibliography" section mentioned in the header.)

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| 0-1 | 8-8 | 5-7 102 |

$$\begin{array}{r} 21,028 \\ \hline 3807702 \end{array}$$

1,150,740



Others form part of a system running from the amphitheatre to the railway station and the Commander-in-Chief's residence, and from both the latter to the commemorative column, lying on the axis between Indraprastha and Government House is the focal point of the roads and avenues on the parkway.

A lake which can be obtained by river treatment is shown on the plan. The lay-out has been made independent of the water effect, but the Committee think that its ultimate creation will enhance considerably the beauties and general amenities of the new capital and it should and would become an integral portion of the design now submitted.

The report contains lengthy recommendations concerning water-supply, drainage, sewage system, parks and communications. It is imperative, it says — "that a complete scheme of railway arrangements designed to serve the whole of the capital, both old and new, should be an essential feature of the lay-out of the Imperial City, and this important matter should not be left to be settled when it is too late to deal with it." The main lines of the new central station and the difficulty experienced in meeting the various railway interests concerned will probably necessitate the postponement of this part of the scheme and the needs of New Delhi will be met by a diversion of the existing Agra-Delhi Chord Railway to a line drawn eastward of Humayun's Tomb and Purana Qilla and the construction of a new through station near the site or the proposed Central station. Another important modification consists in the reservation of the existing south of the Delhi and Aynore Gates of the city for the purpose of the extension of Old Delhi.

Temporary Capital—For the use of the Government of India during the five years the building of the new capital is expected to occupy—a period that will have to be extended owing to the conditions created by the war—arrangements have been selected along the Alipur Road, between the present civil station of Delhi and the Ridge. The early idea that many of the officials should live under canvas had to be given up, and there are now temporary offices and residences. The architect's and method of construction are similar to those adopted in the exhibition buildings at Allahabad in 1910, but the buildings are expected to outlast the transitional period for which they are intended. They will subsequently be an asset of some value, the site they occupy becoming a suburb of the capital.

Chief Commissioner Appointed—On October 1, 1912, by proclamation, there was constituted an administrative enclave of Delhi under a Chief Commissioner, Sir W. H. Bailey, I.O.S. The Delhi district of the Punjab, from which this enclave was entirely taken, consisted of three tahsils or subdivisions, and the enclave was formed by the central tahsil, that of Delhi, and by such part of the southern tahsil, Ballabgarh, as was comprised within the limits of the police post of Mathura. Delhi Province has an area of 525 square miles to which has recently been added an area of 45

The Architects' Designs—At the Royal Academy in 1914 there were exhibited drawings by Mr. Lutyens and Mr. Baker, which, though provisional and rather in the nature of what are called Warrant Designs, show how the architectural problems of the new capital are to be solved. Government House and the Secretariat have been planned by them as one block, as it were a Capitol, facing towards Indraprastha. The Secretariat is to be built on the rock of Raisina hill, the top of which has been levelled for the purpose behind the Secretariat is to be a raised causeway forming the approach to Government House and Government House itself is to be built on a high basement constructed on an outcrop of rock. The main processional route to Government House is to be along a sloping way (at a gradient of one in 22½) which leads from a semi-circular piazza, the "Great Court," to the level of the Secretariat buildings.

"Government Court", a space of about 1,100 feet in length, and 400 in breadth, flanked to the north and south by the two blocks of Secretariat buildings. These buildings have been designed by Mr. Baker and the aggregate cost will be some £750,000. According to the design the eastern end of each block is marked by deep loggias looking out over the central vista. In the centre of each block is a dome entrance hall in the south block it surmounts a Conference hall with a suite of cloak and reception rooms. Each block contains three doors. In the lowest are motor garages, gowns, and record rooms in the middle floor are the offices of Members, Secretaries and other officers in the top floor are clerks' rooms. An essential feature of the design, and one which sets the character of the whole building, is the provision of loggias and recessed gateways or courts giving views through to the fountain. The verandahs so familiar in Indian buildings are altogether absent. The architect relies for control of temperature on thick external walls with an air space inside, together with the thick window shutters adopted so widely in Southern Europe and the wide *chajja* characteristic of Oriental buildings. Between the north and south Secretariat blocks, in the way into the "Viceroy's Court," the raised causeway already referred to—leading up to Government House. The Court is about 600 feet in breadth and 1,300 feet in length, it will be treated with grass and waterways and low trees and should form a different approach to the final group of buildings at a point midway in the causeway, roads lead off to the north and south, forming alternative lines of approach to Government House. One thus reaches the portico of Government House This portico is raised some twenty

| | |
|---|--|
| (b) Travelling Allowances of Officers and Establishments, Rs 6,30,000 | |
| (c) Supplies, Services and Contingencies, Rs 3,78,000 | |
| (d) Works Expenditure, (1) Buildings, Rs 3,09,87,200, (2) Communications, Rs 29,91,600, (3) Parks and Public Improvements, Rs 27,34,500, (4) Electric Light and Power, Rs 48,40,700, (5) Irrigation, Rs 27,49,000, (6) Water Supply, Sewerage, Drainage, etc., Rs 73,77,900, (7) Purchase of Tools and Plant, Rs 35,50,600, (8) Survey and General Preliminary Expenditure, Rs 42,82,100, (9) Maintenance during Construction, Rs 20,00,000 | |
| (e) Acquisition of Land taken up, Rs 36,48,200 | |
| (f) Other Miscellaneous Expenditure, Rs 6,000 | |
| Deduct anticipated recovery from tools and plant, Rs 10,00,000 | |
| These figures when added up make an aggregate total of Rs 7,67,04,300, or £ 5,13,620, but said His Excellency, "as we are anxious to face our liabilities for starting the new City to rate out of Rs 7,67,04,300, or £ 5,13,620, but said His Excellency, "as we are anxious to | |

the fullest extent possible we consider it necessary to make a special provision for contingencies and unforeseen expenditure in excess of the usual provision that has been made of 5 per cent on the works only, by adding a sum of one and a half crores of £1,00,00,000. We have accordingly a very large reserve to meet future possibilities, which we are not able to foresee at present. I should add that the expenditure of this additional crore and a half on unforeseen contingencies will be strictly controlled by the Government of India and no part of it spent unless absolutely necessary. On the other hand the project estimate contains certain items such as land, residences, water supply, electric power, irrigation, on which recoveries in the form of rent or taxes will in addition to meeting current expenditure partially at any rate cover the interest on capital outlay, while there are other items on which some return account or the sale of leases, general taxes, and indirect receipts may be expected."

Two Cathedral Schemes—In October 1913 a letter was published in *The Times* from the Bishop of Calcutta on the provision of a Cathedral at Delhi. He appealed for £50,000 in addition to any grant given by the Government, and quoted in his letter the following statement of approval by the King-Emperor "I heartily approve of the project to build a Cathedral in the new city of Delhi. I trust that the appeal for the necessary funds may meet with a generous response, so that in due time the capital of India may possess a Cathedral which in design and character will testify to the life and energy of the Anglican Church and be worthy of its architectural surroundings, both of days gone by and of those to come." His Majesty subscribed £100 and the Queen £50 to the fund. The Indian Church Aid Association have received several contributions towards the building fund for the proposed Cathedral Church, in response to the appeal of the Bishop of Calcutta.

fact about the canvasy and hilly fact above the surrounding country. The house itself, a domed structure which dominates the scheme of the buildings surrounding the Group round the Durbar Hall will be the star rooms and great towers from the entrance courts on the north and south sides. In the right wing is the Chamber of the Legislative Council or the Government and offices for its members. In April 1912 the Indian Secretary of State indicated in Parliament the decision that this Chamber should be attached to the residence of the Governor-General. It has therefore, been included in the design of Government House, but it is to be a separate apartment through a previous scheme of its own. The last wing, containing the private suite. In the rest of the house will be a raised garden wall and terrace with the manner of the Moghul, and behind that again on the level of the surrounding country a park which will contain the rest houses and quarters. The park will lead up to the rocky slopes of the bridge, which close in the rest on the west. The house, which has been designed by Mr. Lutyens, will, with its attached quarters, garden and park, cost approximately £500,000.

Style of Architecture—There had been a pronounced "birth of the style" over Delhi and if these designs are a justification to neither of the extreme and opposed schools or thought, they clearly showed an endeavour to apply, with due regard for Indian sentiment, the spirit and essence of the great traditions of architecture to the solution of structural problems conditioned upon an Indian climate and Indian surroundings and requirements. To use the language of the architects themselves, "It has been their aim "to express, within the limits of the medium and of the powers of its means, the deal and the live of British rule in India, or which the New Delhi must ever be the monument."

Cost of the Scheme—It was at first tentatively estimated that the cost of the new capital would be four million sterling and that sum was given in the original despatch of the Government of India on the subject. A revised estimate was given by H. E. the Viceroy in Council in March 1914. That estimate is as follows—

(a) Salaries and Allowances, Rs 70,18,700

Chaque may be sent to the Secretary, Indian Church Aid Association, Church House, Westminster, S W and crossed Lloyds Bank, St James's Street, S W

A Roman Catholic Cathedral is also projected and Father Paul Hughes, O M C, has been touring India collecting money for the Cathedral Fund

Sanitary Improvements—While the work on the new city has been going forward various improvements in the existing Delhi have been carried out and the sanitary conditions in particular have been much improved. The dy nuisance which was extremely bad in Delhi has been much reduced, and other schemes have been formulated as the result of a sanitary survey which embraced the whole of the city. In the past Delhi's death-rate has consistently exceeded the birth-rate, and but for immigration from the outlying districts the population would have gone down. In 1912 the death and birth rates were practically the same and in 1913 the figures per thousand of population were births 43.5, and deaths 43.7. In 1914, the birth rate rose to 49.10, while the

There are about 365 Share and Stock Brokers in Bombay. They carry on business in the Brokers' Hall, bought in 1899 from the funds of the Share and Stock Brokers' Association formed to facilitate the negotiations and the sale and purchase of joint stock securities promoted throughout the Presidency of Bombay. Their powers are defined by rules and regulations framed by the Board of Directors and approved by the general body of Brokers. The Board has the power to fix the rates in times of emergencies. It is composed of Sir Sharfud Din (Chairman), Mr. Parbhudas Mirchandani (Vice Chairman), Mr. Manojee Estabadi, Mr. Bhattacharya, Mr. Shapurjee Sorabjee, Mr. Nageshji Motichand, Mr. Hirschand Vasani, Mr. Bhaidas Goculdas, Mr. Vaidal Punamchand and Mr. Jamnadas Morari (Secretary). At first the admittance fee for a broker was Rs 5 which was gradually raised to Rs 1,000. There are two classes of Exchange Brokers, Europeans and Indians, the latter being certified for recognition by the native Stock Exchange Business in Government Paper and all other Trustees' Authorised Securities is carried on under the rules of the Bombay Stock Exchange, but in the street outside the hall

For many years the Calcutta Share Market had its meeting place in various gullies in the business quarter and was under no control except that of established market custom. In 1903 the Calcutta Stock Exchange Association was formed, a building was leased in New China Bazar Street now called Royal Exchange Place a representative committee was formed, and the existing trade customs were focused into rules drawn up for the conduct of business. Admittance as a member of the Stock Exchange is by vote of the committee, and the entrance fee is at present

STOCK EXCHANGES.

Rs 500. The market custom differs very materially from that of most other Stock Exchanges since there are no settlement days, delivery is due the second day after the contract is passed and sales of securities are effected for the most part under blank transfers. Another difference in procedure as compared with the London Stock Exchange is that there are no "jobbers" in the Calcutta market. The Dealers who take their place, more or less, are not compelled to quote a buyer's and a seller's rate and are themselves Brokers as well as dealers, calling upon the Banks and other clients and competing with Brokers.

There are about 160 members, besides outsiders, Brokers, the former consisting of European, Jewish, Marathi, and Bengalee firms. The Marathias predominate. The volume of bona fide Investment business is comparatively small and insufficient for the number of Brokers. The principal business transacted on the Calcutta Stock Exchange is connected with the shares in Jute Mills Coal Companies, Miscellaneous Industrial concerns (such as Paper, Flour, Sugar) Railway and Transit Companies and Debentures, the latter comprising those of Industrial concerns and Trustees of Investment Securities, namely Municipal and Port Trust Debentures. When special operations are being actively engaged in, which frequently take the form of forward contracts for delivery in three months' time, the value of securities changing hands may aggregate as much as a crore of rupees per month, but since the trade is not constant and one year differs very much from another, it would be difficult to estimate what the average annual turnover would amount to. The association has an honorary secretary and is not at present affiliated to the Bengal Chamber of Commerce.

Higher College for Chiefs—It was proposed during 1914 that a higher college for Chiefs should be established at Delhi and in this connection a conference of Chiefs and Political Officers was held at Delhi, in March, at which the Viceroy presided. It was subsequently announced that subscriptions offered towards the college amounted to about ten and a half lakhs, various recurring sums were promised, and the Government of India also promised to recommend the Secretary of State a grant of Rs 50,000 a year. Thus the whole capital under consideration

deaths fell to 42.14. There has been a notable decrease in infantile mortality in 1912, the number of deaths was 4,091 and in 1913 they numbered 3,380. The later number slightly increased, however, in 1914 when deaths numbered 3,685. The deaths of people of all ages as compared with 1913 have decreased in 1914 from 6,864 to 5,601. Decreases were, fever from 6,820 to 5,091 & small-pox 106 to 5, plague from 7 to 2, cholera from 24 to 10.

Land Revenue Administration Provincial Reports for Lower Provinces (Bengal), Bihar and Orissa, Assam, United Provinces, Punjab, Central Provinces and Berar, Madras and Malabar
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Opium Department Reports, United Provinces and Bombay
Stamp Department Report for each Province
Registration Department Report for each Province
Income Tax Report for each Province
Agricultural and Veterinary —
Report on the Progress of Agriculture in India
Report on the Agricultural Research Institute, Report on the Agricultural Research Institute, Bulbuls or the Agricultural Research Institute, Punjab, and of the Provincial Departments of the Department of Agriculture
Proceedings of the Board of Agriculture, Agricultural Journal of India (quarterly)
Report of the Department of Agriculture in each Province
Reports on various Agricultural Stations, Experimental Farms, and Botanic Gardens
Season and Crop Report for each Province
Agricultural Statistics of India
Area and Yield of certain Principal Crops
Report on Production of Tea in India
Report on Tea Culture in Assam
Statistics compiled from the Reports of Provincial Civil Veterinary Departments
Report of the Canal Specialist
Report of the Imperial Bacteriological (Veterinary)
Reports of the Civil Veterinary Departments for Madras, Bombay, United Provinces, Punjab, Bengal, Bihar, and Orissa
Orissa

Statistical Abstract relating to British India (Parliamentary Paper)
Statistics of British India —
Part I — Industrial (Factories, Mills, Mines, &c)
Part II — Commercial (Foreign Trade and Shipping, &c)
Part III — Commercial Services (Post Office, Railways, Telegraphs, &c)
Part IV (a) — Finance and Revenue (Paper Currency, Coinage, Public Debt, &c)
Part IV (b) — Finance and Revenue (Principal Heads or Revenue, Salt, Opium, &c)
Part V — Area, Population, and Public Health (Area, Population, and Immigration, Births and Deaths, Vaccination, &c)
Part VI — Administrative and Judicial (Administrative Divisions, Civil and Criminal Justice, Registration, Police, Jails, &c)
Part VII — Educational (Education, Printing Presses, and Publications)
Part VIII — Local Funds (Municipalities, Local Boards, and Port Trusts)
Census Reports (Decennial), India and Provincial
Administration Reports, Madras, Bombay, Coorg, United Provinces, Punjab, Bengal, Central Provinces and Berar, Bihar and Orissa, Assam, Andaman and Nicobar Islands, Civil and Military Station of Bangalore, Ajmer-Merwara, Baluchistan, North-West Frontier Province, Delhi
Justice and Police —
Report on the Administration of Civil Justice for each Province
Report on the Administration of Criminal Justice for each Province
Report on Jails for each Province
Reports on Police, for each Province, and for Bombay Town and Island, Calcutta, and Rangoon
Finance and Revenue Accounts of the Government of India
East India Financial Statement (Parliamentary Paper)
Return of Net Income and Expenditure for eleven years (Parliamentary Paper)
Accounts and Estimates Explanatory Memorandum (Parliamentary Paper)
Home Accounts (Parliamentary Paper)
Estimate of Revenue and Expenditure (Parliamentary Paper)
Loans raised in England (Half-yearly Parliamentary Paper)
Loans raised in India (Half-yearly Parliamentary Paper)
Mint Reports for Calcutta and Bombay
Mint Reports for Calcutta and Bombay
Paper Currency Department Report
Statistics compiled from the Finance and Revenue Accounts

Reports of Madras and Bombay Irrigation Departments.
Annual Report on Architectural Work
Post Office and Telegraphs —
Post Office Report
Report of Indo-European Telegraph Department
Scientific Departments —
Report of the Operations of the Survey of India
Records of the Survey of India
Records and Memoirs of the Geological Survey of India
Report of the Indian Meteorological Department
Indian Weather Review, Annual Summary
Memoirs of the Indian Meteorological Department
Report of the Director General of Observatories
Memoirs and Bulletins of the Kodaikanal Observatory
Report of the Board of Scientific Advice
Report of the Archaeological Survey of India, and Provincial Reports
Report and Records of the Botanical Survey and the Press —
Education, Literature, and the Press —
Education Report for each Province
Quinquennial Review of Education (Parliamentary Paper)
Reports on Municipalities for each Province
and for Calcutta, Bombay City, Madras City, and Rangoon
Local Funds for each Province
Reports of Port Trusts of Calcutta, Bombay, Madras, Rangoon, Karachi, and Aden
Medical, Sanitary, and Vital Statistics —
Report of the Sanitary Commissioner with the Government of India
Report on Sanitary Measures in India (Parliamentary Paper)
Report of the Sanitary Commissioner for each Province
Vaccination Report for each Province
Report on Civil Hospitals and Dispensaries for each Province
Report on Lunatic Asylums for each Province
Report of the Chemical Examiner and Bacteriologist for each Province
Scientific Memoirs by Officers of the Medical and Sanitary Departments
Reports of the All-India Sanitary Conferences
Reports of the Imperial Malaria Conferences
Indian Journal of Medical Research (Quarterly)
Emigration and Immigration —
Calcutta Port Emigration Report
Assam Immigration Report
Prices and Wages —
Prices and Wages in India
Variations in Indian Price Levels
Reports of Provincial Wage Commissions

Co-operative Societies —
Statements showing Progress of the Co-operative Movement in India
Report on Co-operative Credit Societies for each Province
Reports of Conferences, of Registrars of Co-operative Credit Societies, India and Provincial
Forests —
Review of Forest Administration in British India
Report on Forest Administration for each Province
Reports of the Forest Research Institute and the Imperial Forest College, Dehra Dun
Indian Forest Memoirs
Indian Forest Records
Forest Bulletins
Mineral Production and Mines —
Review of Mineral Production (in Records of Geological Survey)
Report on Production of Coal in India
Report of the Chief Inspector of Mines
Trade and Manufactures —
Annual Statements of Sea-borne Trade and Navigation, India and Provincial (Madras, Bombay, Sind, Bengal, Burma)
Review of the Trade of India (Parliamentary Paper)
Tables of the Trade of India (Parliamentary Paper)
Provincial Reports on Maritime Trade and Customs (including working of Merchandise Law Act) for Bengal, Bihar and Orissa, Bombay, Sind, Madras, and Burma
Accounts of Sea-borne Trade (monthly and for Calendar Year)
Accounts of Land Trade (monthly)
Annual Statement of Coasting Trade of British India
Report on the Trade and Navigation of Aden
Accounts of Trade carried by Rail and River in India
Report on Inland, Rail-borne, or Rail and River-borne Trade for each Province
External Land Trade Reports for Bengal, Bihar and Orissa, Assam, Burma, United Provinces, Punjab, and British Baluchistan
Indian Trade Journal (weekly)
List of Joint-stock Companies in British India and Mysore
Reports on the working of the Indian Companies Act (Provincial)
Report on the working of the Indian Factories Act for each Province
Report of the Chief Inspector of Explosives
Public Works —
Administration Report on Railways (Parliamentary Paper)
Railways and Irrigation Works Return of Capital Expenditure, &c (Parliamentary Paper)
Provincial Reports on Public Works (Buildings and Roads)
Report on Financial Results of Irrigation Operations
Report on Irrigation Revenue for each Province

Customs Tariff.

The customs revenue is mainly derived from the general import duty, certain special import duties such as those on arms, liquors, sugar, petroleum and tobacco, and an export duty on rice. The general rate of duty on commodities imported into British India by sea has been 5 per cent since 1882, when the general duties were abolished. In 1882, were reimposed in 1894, since which date the general rate of duty on commodities imported into British India by sea has been 5 per cent. Cotton was exempted in 1894 when the general duties were received, in December 1894 a 5 per cent duty *ad valorem* was imposed on imported cotton goods and yarns, while an excise duty of 5 per cent was imposed on all yarns of counts above 20 spun at power mills in British India, in February 1896 cotton yarns and threads imported or manufactured in India were freed from duty, while a uniform 3 per cent *ad valorem* duty was imposed on all woven cotton goods imported or manufactured in India at power mills. The products of hand looms are exempted from duty, while a uniform 3 per cent *ad valorem* duty was imposed on all woven cotton goods. The duties are levied for local purposes, and not for the protection of Indian industries. It will be noted that machinery (excluding tools and implements to be worked by manual or animal labour), raw materials, gold, living animals, food grains, coal, raw cotton, raw wool, cotton twist and yarn and so on and printing materials, books (but not paper) are, among others, on the free list. In 1896-97, the last year of the existing arrangements, the net customs revenue amounted to Rs. 3,45 lakhs and in 1902-03 Rs. 4,26 lakhs. Last year it reached Rs. 7,87 lakhs. The gross revenue from imports, as it exceeded, was Rs. 8,07 lakhs—a decrease of 14 per cent as compared with the customs revenue (Rs. 9,36 lakhs) recalled in the previous year.

Schedule II—(Import Tariff)

| No | Names of Articles | Per | Rate per duty |
|----|-------------------|-----|---------------|
|----|-------------------|-----|---------------|

Arms, Ammunition, and Military Stores

Including also any articles, other than those included in Nos. 1 to 12 of this schedule which are "arm" within the meaning of the Indian Arms Act, and any articles which the Governor General in Council may, by notification in the *Gazette of India*, declare to be "Ammunition" or "Military Stores" for the purposes of this Act

1 Firearms other than pistols, including gas and air guns and rifles

2 Barrels for the same whether single or double

3 Pistols

4 Barrels for the same, whether single or double

5 Springs used for firearms, including gas and air guns

6 Gun stocks, sights, blocks and rollers

7 Extractors, nippers, heel-plates, pins, screws, tangs, bolts, thumb pieces, triggers, trigger-guards, hammers, plates and all other parts of a firearm (including gas and air gun or rifle) not herein otherwise provided for, and all tools used for cleaning or putting together or loading the same

8 Machines for making, loading or closing cartridges

9 Machines for capping cartridges

10 Exception 1—Articles falling under the 5th, 6th, 8th, 9th or 10th head of the foregoing list, when they appertain to a firearm falling under the 1st or 3rd head, and are fitted into the same case with such firearm

Exception II—The following are also free, namely—
(a) Arms forming part of the regular equipment of an officer entitled to wear diplomatic, military, naval, or police uniform,
(b) A sword, a revolver, or a pair of pistols, when accompanying an officer of His Majesty's Regular Forces, or a commissioned officer of a volunteer corps, or certified by the commanding officer of the corps to which such officer belongs, or in the case of an officer not attached to any corps, by the officer commanding the station or district in which such officer is serving, to be imported by the officer for the purposes of his equipment.

Each

50 0 0
30 0 0
15 0 0
10 0 0
8 0 0
5 0 0
2 8 0

1 8 0
10 0 0
2 8 0

Free Free

Schedule IV

Schedule IV and III are given without revision, which

Schedule IV has been revised.

Schedule II—(Import Tariff)—continued

| No | Names of Articles | Per ° | Rate of Duty. |
|----------|---|-------------------|---------------|
| 10 | Arms, Ammunition, and Military Stores— <i>could</i>
Machines for capping cartridges— <i>could</i>
<i>Exception II (g) Morris tubes and patent ammunition, etc—could</i>
(c) Swords and revolvers which are certified by an Inspector-General of Police to be part of the ordinary equipment of members of the Police force under his charge
(d) Swords forming part of the equipment of native commissioned officers of His Majesty's Army,
(e) Swords for presentations as army or volunteer prizes,
(f) Arms, ammunition, and military stores imported with the sanction of the Government of India for the use of any portion of the military forces of a Native State in India which may be maintained and organised for Imperial Service,
(g) Morris tubes and patent ammunition when imported by officers commanding British and Native regiments or volunteer corps, for the instruction of their men
<i>Proviso 1</i> —No duty in excess of 10 per cent <i>ad valorem</i> shall be levied upon any of the articles numbered 1 to 10 in the foregoing list when they are imported in reasonable quantity, for his own private use, by any person lawfully entitled to possess the same
<i>Proviso 2</i> —When any articles which have been otherwise imported, and upon which duty has been levied or is leviable under numbers 1 to 10, are purchased retail from the importer by a person lawfully entitled as aforesaid, in reasonable quantity for his own private use, the importer may apply to the Customs Collector for refund or remission (as the case may be) of so much of the duty thereon as is in excess of 10 per cent <i>ad valorem</i> and if such Collector is satisfied as to the identity of the articles and that such importer is in other respects entitled to such refund or remission he shall grant the same accordingly
Gunpowder, all sorts
stores
All other sorts of arms, ammunition, and military stores | <i>ad valorem</i> | Ten per cent |
| 11
12 | | | |

By the Commerce and Industry Department Notification No 3798—90, dated the 27th May 1911, all articles, other than those specified below, liable to duty under head, 5, 6, 8, 9, or 10, as the case may be, of the above schedule, were exempted from so much of the duty leviable thereunder on importation into British India as is in excess of duty of 10 per cent *ad valorem*—

Main springs and Magazine springs

Gun stocks and Breech blocks

Actions (including skeleton and waster)

Breech bolts and their heads

Cocking pieces

Locks (for Muzzle-Loading arms)

Machines for making, loading, closing or capping cartridges for rifled arms.

Schedule III—(Import Tariff)

| No | Names of Articles | Per | Rate of Duty |
|----|--|---|--|
| 1 | <p>Liquors, Opium, Salt, Fish, Tobacco and Silver</p> <p>Liquors (a)—</p> <p>Ale beer, and porter</p> <p>Cider, and other fermented liquors</p> <p>Liqueurs and sweetened spirits, cordials, bitters, perfumed spirits, and toilet preparations containing spirit</p> <p>Spirit which has been rendered effectually and permanently unfit for human consumption</p> <p>Spirit used in drugs, medicines, or chemicals</p> | <p>Imperial gallon or 6 quart bottles</p> <p>"</p> <p>Imperial gallon or 6 quart bottles of Londonproof</p> <p>"</p> <p>Imperial gallon or 6 quart bottles of Londonproof</p> <p>ad valorem</p> <p>Imperial gallon or 6 quart bottles</p> | <p>Rs a p</p> <p>0 3 0</p> <p>13 0 0</p> <p>Five per cent</p> <p>7 13 0</p> <p>and the duty to be increased or reduced in proportion as the strength of the spirit exceeds or is less than London proof</p> <p>9 6 0</p> <p>and the duty to be increased in or reduced in proportion as the strength of the spirit exceeds or is less than London proof</p> <p>3 12 0</p> <p>1 8 0</p> <p>24 0 0</p> |
| 2 | <p>Optum (b) and its albaloids</p> | <p>seer of 80 tolas</p> | <p>24 0 0</p> |
| 3 | <p>SALT (c)—</p> | <p>Indian maund of 82½ lbs avoirdupois weight.</p> | <p>The rate at which excise duty is being levied on salt manu- factured in the place where the import takes place. (d)</p> |

Schedule III—(Import Tariff)—contd.

| No | Names of Articles | Per | Rate per duty |
|----|-------------------|-----|---------------|
|----|-------------------|-----|---------------|

| | | |
|--|--|--|
| LIQUORS, OPIMUM, SALT, FISH, TOBACCO AND
SILVER— <i>conold</i> | Indian mround of
82½ lbs avoird-
upolis weight | Such rate or
rates of duty
not exceeding
twelve annas
as the Gov
ernor-Gen eral
in Council may,
by notification
in the <i>Gazette</i>
of <i>India</i> , from
time to time
prescribe (c) |
| 4 SALTED FISH, wet or dry

5 TOBACCO—
Unmanufactured
Cigars
Cigarettes weighing less than 3 lb per thousand
Cigarettes weighing 3lb or more per thousand
Manufactured, other sorts
SILVER bullion or coin, except current coin of the
Government of India which is free | pound
thousand
pound
ounce | 1 0 0
1 10 0
3 2 0
1 4 0
1 2 0
0 4 0 |

(a) Spirit imported from any port in British India, and protected by the certificate of an officer empowered in that behalf, is chargeable with only the amount, if any, by which the duty leviable thereon exceeds the duty shown by such certificate to have been already paid.—(Act VIII of 1894, Section 7)

(6) Opium imported from any port in British India, and protected by the certificate of an officer empowered in that behalf, is chargeable with only the amount, if any, by which the duty leviable thereon exceeds the duty shown by such certificate to have been already paid—(Act VIII of 1914, Section 7)

(c) But imported from any port in British India, and protected by the certificate of the officer empowered in that behalf, is chargeable with only the amount, if any, by which the duty leviable thereon exceeds the duty shown by such certificate to have been already paid—(Act VIII of 1894, Section 7)

(d) By Finance Department Notification No 1748-Evc, dated the 20th March 1907, the duty was fixed at one rupee in the case of Burma, Bengal, Madras, Bombay and Sind. In case of Aden the duty is one rupee for each 140 lb avoirdupois.

(c) The rate is six annas

Schedule IV—(Import Tariff.)

GENERAL DUTIES

| No | Names of Articles | Per | Tariff Valuation | Duty |
|----|---|-----|----------------------------|---------------|
| 1 | ANIMALS, LIVING
HORSES, CATTLE, SHEEP, and all other living animals of all kinds | d | Rs a p | Rice |
| 2 | ARTICLES OF FOOD AND DRINK | cwt | 42 0 0 | Five per cent |
| 3 | CORRED FRUITS AND VEGETABLES (except fresh fruits and vegetables not separately enumerated, which are free)—
Almonds without shell
" " in the shell
" " C (Kagazi) Persian
" " I uropan | " " | 82 0 0
75 0 0
45 0 0 | " "
"
" |

Schedule IV—(Import Tariff)—contd.

| No | Names of Articles. | Per | Tariff Valuation | Duty |
|----|---|-----|------------------|---------------|
| 7 | ARTICLES OF FOOD AND DRINK—contd. | | | |
| | SPICES— | | | |
| | Betelnuts, raw, whole, split, or sliced, from Goa | cwt | 14 0 0 | Five per cent |
| | " " " " " " Straits | | | |
| | " " " " " " and Dutch East Indies | | | |
| | " " " " " " whole, from Ceylon | | 9 0 0 | |
| | " " " " " " raw, split (sun-dried) from Ceylon | | 21 0 0 | |
| | Chilies, dry | | 12 0 0 | |
| | Cloves | cwt | 42 0 0 | |
| | " " stems and heads | | 10 0 0 | |
| | " " in seeds, unripened | | 13 0 0 | |
| | Ginger, dry | | 15 0 0 | |
| | " " " " " " whole | lb | 1 8 0 | |
| | Nutmegs | | 0 5 0 | |
| | " " in shell | | 0 3 0 | |
| | Pepper, black | cwt | 32 0 0 | |
| | " " white | | 38 0 0 | |
| | All other sorts of spices | | ad valorem | |
| 8 | SUGAR, crystallised, beet | cwt | 9 12 0 | |
| | " " " " " " and soft, refined in China | | 11 0 0 | |
| | " " " " " " from Java, 23 Dutch standard and above | | 9 8 0 | |
| | " " " " " " from Java, 16 to 22 Dutch standard | | 8 4 0 | |
| | " " " " " " from Java, 15 Dutch standard and under | | 9 8 0 | |
| | " " " " " " to 16 Dutch standard and over | | 8 12 0 | |
| | Molasses from Java | | 2 8 0 | |
| | " " other countries | | 2 8 0 | |
| | Sugar, all other sorts, including saccharine produce of all kinds and confectionery | lb | 0 10 0 | |
| 9 | TEA, black | | 0 9 0 | |
| | " " green | | 0 10 0 | |
| 10 | CHEMICALS, DRUGS, MEDICINES AND NARCOTICS AND DYEING AND TANNING MATERIALS | | | |
| | CHEMICAL PRODUCTS AND PREPARATIONS— | | | |
| | Acid, sulphuric | cwt | 2 6 0 | |
| | Alkali, Indian (saji-khar) | | 5 12 0 | |
| | Alum | | 16 0 0 | |
| | Arsenic (China mass) | | 31 0 0 | |
| | " " other sorts | | ad valorem | |
| | Copperas, green | | 3 12 0 | |
| | Explosives namely, blasting gelatine, dynamite, roborite, toulite, and all other descriptions, including detonators and blasting fuse | cwt | 3 12 0 | |
| | Sulphuric acid | | 3 12 0 | |
| | Soda ash | | 3 12 0 | |
| | Soda Bicarbonate | | 3 12 0 | |

Schedule IV—(Import Tariff)—*contd.*

| No | Names of Articles | Per | Tariff
Valuation | Duty |
|----|-------------------|-----|---------------------|------|
|----|-------------------|-----|---------------------|------|

[illegible]

Schedule IV.—(Import Tariff)—*contd.*

| No. | Name of Article | Per | Tariff Valuation | Duty. |
|-----|--|----------------|------------------|----------------|
| 24 | MACHINERY, &c.—contd | | | |
| | Provided that the term does not include tools and implements to be worked by manual or animal labour, and provided also that only such articles shall be admitted as component parts of machinery as are indispensable for the working of the machinery and are, or are adapted for any other purpose. | | | |
| | "Machinery and component parts thereof made of steel, brass or other metal are included in this category | | | |
| 25 | METALS, unwrought and wrought, and articles made of metals— | | | |
| | Bars, rods and leaves, European | | ad valorem | Five per cent. |
| | China | | | |
| | Pateent or yellow metal, sheets weighing, 1 lb or above per square foot, and sheathing, | cwt | 54 0 0 | |
| | batteries, and plates | | 33 0 0 | |
| | Pateent or yellow metal (gold) | | | |
| | bars, flat or in rolls, weighing less than 1 lb per square foot | | | |
| | all other sorts | | | |
| | Copper, bolt and bar, rolled | cwt | 62 0 0 | |
| | plates and composition nails | | | |
| | old | cwt | 45 0 0 | |
| | plates, tiles, ingots, coils, bricks, and slabs | | 58 0 0 | |
| | China, white, copprware | lb | 2 7 0 | |
| | roll of darpama, white; 10 to 11 in X 4 to 5 in. | hundred leaves | 1 14 0 | |
| | roll of darpama, coloured, 10 to 11 in X 4 to 5 in. | | | |
| | wire, including phosphor-bronze | | 2 0 0 | |
| | all other sorts, unmanufactured and manufactured, except current coin of the Government of India, which is free | | | |
| | German Silver | | | |
| | Gold bullion and coin | | | |
| | Iron, anchors and cables | | | |
| | Lowmoor and similar qualities, all descriptions of iron, other than Lowmoor or Swedish pig-iron, and hoop, other than Lowmoor or Swedish, if galvanised, tinned, or lead-coated | | | |
| | Iron bar, Swedish and similar qualities, round-rod, and square, under 10 in diameter | | | |
| | ton | | 190 0 0 | |
| | ad valorem | | | |
| | ton | | 110 0 0 | |
| | ad valorem | | | |
| | ton | | 200 0 0 | |
| | ad valorem | | | |
| | Five per cent. | | | |
| | One per cent. | | | |

Schedule IV—(Import Tariff)—*contd.*

| No. | Names of Articles | Per | Tariff Valuation | Duty |
|-----|---|-----|-------------------------|---------------|
| 15 | METALS AND MANUFACTURES OF METALS—cont
METALS, unwrought and wrought, and articles made of metals—cont | | Rs a. p. | |
| | Iron, all other sorts, including discs or circles and wire netting | | ad valorem | Five per cent |
| | Lametta | | | |
| | Lead, all sorts (except sheets for tea chests which are free) | | | |
| | Quicksilver | | | |
| | Shot, bird | | | |
| | Steel, anchors and cables | lb | 1 " 8 0
ad valorem | One per cent |
| | Blooms | | | |
| | angle, T | ton | 110 " 0 0
ad valorem | " |
| | " and hoop, if galvanised, tinned, or lead-coated | ton | 110 " 0 0
ad valorem | " |
| | bars, (other than cast steel) | ton | 110 " 0 0
ad valorem | " |
| | Swedish and similar qualities | ton | 110 " 0 0
ad valorem | " |
| | nail-rod, round-rod, and square, under ½ inch in diameter | ton | 115 " 0 0
ad valorem | " |
| | bar, galvanised, tinned, lead-coated, polished, or polished | ton | 115 " 0 0
ad valorem | " |
| | channel, including channel for carriages | | | |
| | plates, above ½ inch thick, and strips | ton | 120 " 0 0
ad valorem | " |
| | sheets, up to ½ inch thick | " | 125 " 0 0 | " |
| | sheets (other than corrugated), plates or strips, if galvanised tinned, lead-coated, chequered, or planished | ton | 140 " 0 0
ad valorem | " |
| | hoop | " | 140 " 0 0 | " |
| | nails | | | |
| | nuts and bolts, also hooks and nuts for roofing, galvanised or black | | | |
| | old beams, joists, pillars, girders, screw-piles, bridge work, and other such descriptions of steel, imported exclusively for building purposes | cwt | 2 " 8 0
ad valorem | " |
| | cast and blistered, including spring and tub steel | | | |
| | roofing, guttering, and continuous roofing | " | " | " |
| | pipes and tubes, including fittings therefor, such as bends, boots, elbows, tees, sockets, flanges, and the like | " | " | " |
| | rails, chairs, sleepers and bearing, and fish-plates, spikes (commonly known as dog-splines), switches, and crossings, other than those described in No 60, also lever-boxes, clips, and tie-bars | | | |
| | rivets and washers, all sorts | | | |
| | wire, including fencing wire and wire-rope, but excluding wire-netting | | | |

33

_____)

[illegible]

Schedule IV.—Import Tariff.—contd.

| Tariff | Duty |
|--------|------|
|--------|------|

| Description of Goods | Rate of Duty | Remarks |
|---|---------------|---------|
| 1. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 2. CARRIAGES AND CARRIAGE PARTS , including motor cars, bicycles, rickshaws, jinrikshas, bath chairs, perambulators, tricycles, wheelbarrows, and all other sorts of carriages and component parts thereof, but excluding motor cars designed to carry goods and containing a prime mover, which are free | Five per cent | " |
| 3. PROVIDED THAT THE ARTICLES ARE CERTIFIED BY THE OFFICER COMMANDING THE UNIT OR BRIGADE OR ANY HIGHER MILITARY AUTHORITY OR ANY OF THEIR STAFF OFFICERS AS HAVING BEEN OFFERED FOR COMPETITION OR PRESENTED WITH THE GOLE OR MAIN OBJECT OF ENCOURAGING MILITARY EFFICIENCY, AND THAT THEY HAVE HAD ENGRAVED ON THEM BEFORE BEING SHIPPED THE OBJECT FOR WHICH PRESENTED AND EXCEPT IN THE CASE OF THOSE SENT BY DONORS RESIDENT ABROAD FOR PRESENTATION OR COMPETITION IN INDIA | Free | " |
| 4. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 5. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 6. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 7. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 8. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 9. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 10. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 11. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 12. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 13. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 14. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 15. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 16. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 17. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 18. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 19. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |
| 20. CHINA AND JAPANESE WARE including lacquered ware, but excluding earthenware, china and porcelain (for which see No. 32) | Five per cent | " |

Schedule IV.—(Import Tariff)—contd.

[illegible]

Schedule IV.—(Import Tariff)—*contd.*

| No | Names of Articles | Per | Tariff Valuation. | Duty |
|----|--|-----|-------------------|---------------|
| 39 | OTHER ARTICLES, UNMANUFACTURED AND MANUFACTURED— <i>contd.</i>
HIDES AND SKINS (except raw or salted hides and skins, which are free), including parchment and vellum, gold-beaters' skins, and all other descriptions of hides or skins | | ad valorem | Five per cent |
| 40 | HORN | | ad valorem | Five per cent |
| 41 | “ articles made of, not otherwise described
INSTRUMENTS, APPARATUS, AND APPLIANCES, and parts thereof—Computing, Dental, Distilling, Diving, Drawing, Educational, Electric, Electric lighting, Galvanic, Measuring, Musical, Optical, Philosophical, Phonographic, Photographic (including materials for Photography), Scientific, Surgical, Surveying, Telegraphic, Telephonic, Typewriters, and all other sorts, except Telegraphic instruments, and apparatus, and parts thereof, when imported by or under the orders of a railway company, and any instruments, apparatus, and appliances, when imported by a passenger as part of his personal baggage and in actual use by him in the exercise of his profession or calling which are free. All band instruments (other than stringed instruments), imported by a Native regiment of His Majesty's regular forces in India, or by a unit of the Imperial Service Troops, or by a Military Police Battalion, and certified by the Officer Commanding the regiment or unit or the officer in charge of the Military Police Battalion to be for the <i>bona fide</i> exclusive use of the regimental band, or the band attached to the Military Police Battalion, as the case may be, and the following accessories thereto, are also free of duty — | | Rs 2 p | |
| | Bags for bagpipes
Cardholders
Carriages (brown or black)
Cases for reeds and mouth-pieces
Cases (leather or wooden)
Chanters, pipe, and practice
Reed
Instruments
Cleaner for brass and reed
Cord for bagpipes
Crooks for bagpipes
Drum heads
Drum sticks
Drum flesh hoops
Fingertops
Green broadcloth for drums
Green Silk ribbon for drums
Valve tops and needles
Valve corks
Taps for brass instruments
Snare
Springs
Silver buttons for drums
Silver buckles for drums
Instruments
Sanks and slides for brass
Ropes for drums
Ribbons for bagpipes
Mutes for brass instruments
Mouthpieces and caps
Ligatures for reed instruments
Key pads for reed instruments | | | |

Schedule IV.—(Import Tariff)—*contd.*

| Names of Articles | Per | Tariff Valuation | Duty |
|-------------------|-----|------------------|------|
|-------------------|-----|------------------|------|

OTHER ARTICLES UNMANUFACTURED

AND MANUFACTURED—*contd.*

42 Ivory and Ivory-ware—

(Manufactured—

Elephant's tusk—

tusks (other than hollows, centres, and

points) each exceeding 20 lb in weight, and

hollows, centres, and points each weighing

10 lb and over.

Elephant's tusks (other than hollows, centres,

and points) not less than 10 lb and not exceed-

ing 20 lb (each, and hollows, centres, and points,

each weighing less than 10 lb (either than

11 parts, tusks each less than 10 lb (either than

hollows, centres, and points)

each weighing less than 10 lb (either than

11 parts, tusks each less than 10 lb (either than

hollows, centres, and points)

all other sorts, manufactured and unmanufactured

Ivory and Jewels including plate and other

articles of gold and silver—

other than

imported or obtained from European

countries except precious stones and pearls,

which are free.

Ivory and Jewels, which are free

articles of gold, except second hand or used

for any purpose, which are free

Ivory and Jewels, which are free

articles of gold, except second hand or used

for any purpose, which are free

Ivory and Jewels, which are free

articles of gold, except second hand or used

for any purpose, which are free

Ivory and Jewels, which are free

articles of gold, except second hand or used

for any purpose, which are free

Ivory and Jewels, which are free

articles of gold, except second hand or used

for any purpose, which are free

Ivory and Jewels, which are free

articles of gold, except second hand or used

for any purpose, which are free

Ivory and Jewels, which are free

articles of gold, except second hand or used

for any purpose, which are free

Ivory and Jewels, which are free

articles of gold, except second hand or used

for any purpose, which are free

Ivory and Jewels, which are free

articles of gold, except second hand or used

for any purpose, which are free

Ivory and Jewels, which are free

articles of gold, except second hand or used

for any purpose, which are free

Schedule IV.—(Import Tariff)—*could*

[illegible]

Schedule IV—(Import Tariff)—*continued*

| No. | Name of Article | Per | Unit of Valuation | Duty |
|-----|-----------------|-----|-------------------|------|
|-----|-----------------|-----|-------------------|------|

[illegible]

Schedule V—(Import Tariff)

| No. | Names of Articles | Per | Rate of duty |
|-----|---|--|-----------------|
| 1 | Rice husked or unhusked, including rice bran and rice dust, which are not including rice free | Indian
of 82 lb
maund
dupols weight | Rs 1 p
0 3 0 |

Note—Under Act IX of 1903 a customs duty at the rate of a quarter of a pie per pound has been levied from the 31st April 1903 on all tea produced in India and exported from any customs port to any port beyond the limits of British India or to Aden. The proceeds of this cess are paid to the Tea Cess Committee appointed under Section 1 of the Act. On the recommendation of this Committee the maximum rate of a quarter of a pie per pound may be reduced.

Botanical and Zoological Surveys.

The Botanical Survey is under the direction of the Superintendent of the Royal Botanic Garden, Calcutta, with whom are associated the Economic Botanists belonging to the Agricultural Department. In 1912 the post of Reporter on Economic Products was abolished and replaced by that of Economic Botanist in the Botanical Survey. Much of the systematic botanical work of India is done for the department by forest officers and others. Over 7,500 specimens were obtained in 1911-12 by the officer deputed to accompany the labor expedition as botanist, and a material addition was made to the information available as to the vegetation of the little-known frontier region traversed.

Geological Survey—The first object of the Department is the preparation of a general geological map of India. Various economic investigations which form an increasingly important part of the Department's work, are also conducted. These include investigation of marble and -stone quarries for the purpose of building Imperial Delhi the examination of the Kora coal field in the Central Provinces, and of traditional localities in the Punjab and North West Frontier Province, of pitchblende and in the Gya District, &c.

Madras Survey—An important move ment has recently been inaugurated by the Bombay Natural History Society which has collected sub-carpions for the mammals of India. This Survey was begun in 1911 with the object of getting to the bottom of the proper specimens of all the different kinds of mammals in India, Burma, Ceylon and the other islands of the Indian Ocean. It is the first time that the more carefully preserved specimens have been done before, also of the form

It is complete as far as the collection of specimens for the Society's Museum in Bombay is concerned. The Society had before the survey started the largest and most valuable collection, and even in the British Museum in London the Indian specimens were very poorly represented. Three hundred of the coins from England are in the service of the Society and the specimens obtained by the survey are being worked out at the British Museum and duplicates presented to the different Indian Museums. In India most of the coins are being worked out at the British Museum and the specimens obtained by the survey are being worked out at the different Indian Museums. In India most of the coins are being worked out at the British Museum and the specimens obtained by the survey are being worked out at the different Indian Museums.

[illegible]

The Board of Scientific Advisors

NATIVE PASSENGER SHIPS.

The following is a list of the native passenger ships which have been licensed by the Government of India for the service of the coast of India, and the names of the owners and the names of the captains. The list is given in alphabetical order of the names of the ships.

Survey of India.—The following is a list of the ships which have been licensed by the Government of India for the service of the coast of India, and the names of the owners and the names of the captains. The list is given in alphabetical order of the names of the ships.

Topographical Survey.—The following is a list of the ships which have been licensed by the Government of India for the service of the coast of India, and the names of the owners and the names of the captains. The list is given in alphabetical order of the names of the ships.

Survey of India.—The following is a list of the ships which have been licensed by the Government of India for the service of the coast of India, and the names of the owners and the names of the captains. The list is given in alphabetical order of the names of the ships.

Topographical Survey.—The following is a list of the ships which have been licensed by the Government of India for the service of the coast of India, and the names of the owners and the names of the captains. The list is given in alphabetical order of the names of the ships.

Difficulties of the question—The appointment of the committee.—The difficulties of the question are many and varied. The first difficulty is the appointment of a committee to inquire into the matter. The second difficulty is the collection of the necessary information. The third difficulty is the preparation of a report. The fourth difficulty is the presentation of the report to the Government. The fifth difficulty is the consideration of the report by the Government. The sixth difficulty is the implementation of the recommendations of the Government. The seventh difficulty is the execution of the recommendations of the Government. The eighth difficulty is the supervision of the execution of the recommendations of the Government. The ninth difficulty is the evaluation of the results of the execution of the recommendations of the Government. The tenth difficulty is the dissemination of the results of the execution of the recommendations of the Government. The eleventh difficulty is the maintenance of the results of the execution of the recommendations of the Government. The twelfth difficulty is the improvement of the results of the execution of the recommendations of the Government. The thirteenth difficulty is the preservation of the results of the execution of the recommendations of the Government. The fourteenth difficulty is the protection of the results of the execution of the recommendations of the Government. The fifteenth difficulty is the promotion of the results of the execution of the recommendations of the Government. The sixteenth difficulty is the encouragement of the results of the execution of the recommendations of the Government. The seventeenth difficulty is the inspiration of the results of the execution of the recommendations of the Government. The eighteenth difficulty is the motivation of the results of the execution of the recommendations of the Government. The nineteenth difficulty is the stimulation of the results of the execution of the recommendations of the Government. The twentieth difficulty is the energization of the results of the execution of the recommendations of the Government. The twenty-first difficulty is the excitation of the results of the execution of the recommendations of the Government. The twenty-second difficulty is the incitement of the results of the execution of the recommendations of the Government. The twenty-third difficulty is the instigation of the results of the execution of the recommendations of the Government. The twenty-fourth difficulty is the provocation of the results of the execution of the recommendations of the Government. The twenty-fifth difficulty is the irritation of the results of the execution of the recommendations of the Government. The twenty-sixth difficulty is the incense of the results of the execution of the recommendations of the Government. The twenty-seventh difficulty is the incense of the results of the execution of the recommendations of the Government. The twenty-eighth difficulty is the incense of the results of the execution of the recommendations of the Government. The twenty-ninth difficulty is the incense of the results of the execution of the recommendations of the Government. The thirtieth difficulty is the incense of the results of the execution of the recommendations of the Government.

carrying capacity. It is doubtful therefore whether, in the case of passenger ships which are engaged in the carriage of passengers between ports separated by inconsiderable distances, some relaxation should not be allowed in the matter of providing life-boat accommodation for all on board. The matter is thus essentially one for local investigation.

Working of the Act.—Under the Native Passenger ships Act (X of 1887) the term

steamship carrying more than sixty such natives. Local Governments have discretionary power, with the sanction of the Government General in Council, to alter these numbers to fifteen and thirty, respectively. A long voyage is defined in the Act as a voyage in which the ship will, in ordinary circumstances, be continuously out of port for one or more days and twenty hours or more and a short voyage as one in which the ship will not, in ordinary circumstances, be continuously out of port for one hundred and twenty hours. The space allotted to passengers, and some of the conditions, differ in a long and a short voyage.

TIDAL CONSTANTS.

The approximate standard line of High Water may be found by adding to, or subtracting from, the line of High Water at London Bridge, given in the calendar, the corrections given as below —

[illegible]

Wild Animals and Snakes.

In the 25 years ending in 1911 the number of human beings reported to have been killed by snakes 543,984, making together a total of 67,389, but the figures are far from accurate up to the year 1900 deaths from mad dogs and jackals were included in the returns, but as these animals are not ordinarily dangerous to human beings or cattle, the figures have been omitted since 1901. The annual average number of persons killed during successive quinquennia since 1876 is as follows —

| By | | snakes | |
|------|---------|--------|--------|
| wild | animals | | |
| 1885 | 2,752 | 19,605 | 17,214 |
| 1890 | 2,581 | 21,267 | 21,054 |
| 1895 | 2,025 | 22,175 | 22,296 |
| 1900 | 3,456 | 22,175 | 22,296 |
| 1905 | 2,461 | 22,296 | 22,296 |
| 1910 | 2,210 | 21,571 | 21,571 |

During the year 1911, 1,745 persons were killed by wild animals in British India. This figure is about 8.9 per cent higher than the casuities in 1910 but it is lower than in 1912. The largest death-toll, as in 1911, was returned by Bihar and Orissa, which was responsible for nearly one-third of the total for all India. The figures for other provinces generally exhibit increases, but in the United Provinces the number of casuities dropped to 122 from 127 in 1913, while there were trivial decreases in the Bombay Presidency and in the North-West Frontier Province. Coorg and Ajmer Districts which returned 41 and 3 deaths, respectively, in 1911

The largest number of deaths of human beings was, as usual, caused by tigers which were responsible for the loss of 610 lives as compared with 641 in 1912. Increases under this head occurred in Bihar and Orissa, the United Provinces and Bihar and Assam, the first-named province with 229 deaths against 221 in the preceding year showing the highest number of a man killed in a single case. The proportion of the fatality. All other provinces except Bombay which reported 11 deaths in 1911, show a decline the most marked being in the United Provinces which has fallen to 9 from 20 in 1912. 1700 victims in India in 1911.

The loss of human lives due to snake-bite amounted to 22,594, the corresponding figure in 1913 being 21,770. The returns under this head show a general increase in nearly all the provinces and, as in 1913, Bihar and Orissa with 5,968 deaths, the United Provinces with 5,513, and Bengal with 4,756 suffered most heavily. Of these three provinces Bengal shows a slight decrease, while in the other two provinces there was an increase compared with the preceding year. Decreases are noticed in Madras and Assam and no death is reported from Coorg, but the mortality of 1,169 in the Punjab is the highest for that province recorded in recent years. In the last named province, echis vipers were the greatest source of danger and special measures to exterminate them have been organized. The use made of Sir Lauder Brunton's lancets does not yet afford any useful data on which definite conclusions can be formed as to the efficacy of this method of treatment.

Of other animals, leopards were responsible for 281 deaths against 236 in 1913. There was a slight decrease in the number of human beings killed by bears, wolves and elephants, the figures under these heads being 95, 137 and 57, against 105, 152 and 62, respectively, in 1913. To vengas were attributed 27 deaths or 15 more than in the preceding year. The number of deaths recorded under the unclassified head "other animals" rose from 395 in 1913 to 502 in 1914.

During the year 1911, 25,595 wild animals were destroyed in India, the figures under this head occurred in Bihar and Orissa, the United Provinces and Bihar and Assam, the first-named province with 229 deaths against 221 in the preceding year showing the highest number of a man killed in a single case. The proportion of the fatality. All other provinces except Bombay which reported 11 deaths in 1911, show a decline the most marked being in the United Provinces which has fallen to 9 from 20 in 1912. 1700 victims in India in 1911.

India and the War.

HOSTILE FIRMS.

It was early realised in India that the adoption for all purposes, or the classical definition of an enemy would not be sufficient to meet all the political difficulties involved and on 14th November 1914 with the approval of the Secretary of State, the Hostile Foreigners (Trading) Order was issued. The salient feature of this Order was the definition of a "hostile foreigner" as a subject of any one of the enemy states with- out reference to the question of residence. It further gave an absolutely free hand to Gov- ernment in doubtful cases by deeming a hostile firm, as a firm of which a hostile foreigner had been a member or officer on August 3rd 1914. All such firms or foreigners were forbidden to trade except under a license. The right to issue such a license or to impose any condi- tions, whatever rested solely in the Government of India. In the event of a license being refused, the business assets had to be deposited with Government for disposal at their absolute discretion. It will be seen that the immense scope of the definition of a hostile firm brought within the purview of the order numerous firms and in fact firms who happened to have German shareholders or perhaps a German subject as branch manager. To meet some of the cases a general exemption was introduced in favour of companies who had no hostile foreigner as officer and merely had capital for amount less than one third of the whole in the Government Treasury. One or two less important Deutonic firms engaged in rice milling and a number of small miscellaneous concerns and branches of hostile firms in other parts of India have also been treated in the same way.

The salient feature of the German enter- prise in Cutch has been the hide export trade. In this business a ring of some half dozen German firms has, of late years, established a practical monopoly. As they formed the main channel for the export of an important indigenous product and as British firms have not proved anxious to undertake this exceedingly un- savoury trade these firms have been allowed to continue their business under British or neutral management with a strict supervision by the officer appointed by Government to control hostile firms in Bengal. Other German concerns in Cutch have been or are being wound up. They are mostly small miscellaneous businesses with two exceptions. One is a large import and export firm which has figured prominently in the manganese trade in the Central Provinces and elsewhere. The other is a branch of a German Bank, the only German banking concern in India. It is in the hands of the Official Assignee.

In Bombay the hostile firms which have aroused most interest have been those engaged in the synthetic colour trade which in the last three decades has almost annihilated the indig- enous Indian industry. Prior to the war they valued at about one million sterling were annually imported into India and almost the whole of this quantity came from Germany and was shipped to the five German colour works in Bombay. Notwithstanding the

THE WHITE SCHEDULE

[illegible]

total trade of the small proportion of the

wheat in India was cornered and the prices forced up to famine level. At the same time there were large operations in the new crop. The great wheat eating provinces in India are the Punjab and the United Provinces. In parts of the Punjab wheat was forced up to six or seven annas, which is a rate which induces position was such that action was imperative. There had been widespread agrarian trouble in the Western Punjab which was intensified by the war nevertheless was largely caused by the high prices and excessive demands were convinced that if the progressive rate in values was not checked there would be extensive rioting and looting of grain shops in the Punjab and the North-West generally. Government were pressed to take two courses—to prohibit the export of wheat until prices came down to the level of nine seers per rupee, and on the other hand to let the market take its course, on the supposition that the high prices raised by the growers would compensate the consumers for the famine prices which they had to pay for their food. The unofficial view on the question will be found reflected in an interesting debate in the Imperial Legislative Council. As a preliminary step the export of wheat from the Government was limited to 100,000 tons (92,000 tons only were shipped) and in March all exports on private account were prohibited for a year. There were temporary measures, Government took a quite different and even more heroic course—they took the whole of the export trade under their own control.

the Indian market price has been forced up by obvious point, but the causes leading to a rise of prices in India are so little understood, and are so frequently ascribed to a drain on the food store of the country, that it has been thought desirable to make it quite clear

The export of wheat from British India by sea to foreign countries during each month of the last four official years and during the months of April to October, 1915, are stated below, —

| Month | 1911-12 | 1912-13 | 1913-14 | 1914-15. | 1915-16 |
|---------|-----------|-----------|-----------|----------|-------------|
| April | 67,900 | 68,900 | 27,300 | 9,100 | 10,650 |
| May | 135,700 | 107,000 | 166,300 | 24,500 | (a) 104,960 |
| June | 189,500 | 243,500 | 260,400 | 169,000 | (a) 291,000 |
| st | 125,200 | 153,200 | 134,700 | 42,500 | (a) 47,860 |
| subtr | 65,800 | 231,500 | 134,800 | 56,100 | (a) 5,760 |
| ber | 65,700 | 148,500 | 52,700 | 88,300 | 380 |
| mltr | 74,100 | 114,300 | 46,700 | 55,000 | |
| mltr | 97,300 | 79,600 | 21,700 | 37,000 | |
| ry | 101,600 | 99,100 | 20,700 | 25,000 | |
| lberary | 73,200 | 51,500 | 9,700 | 21,600 | |
| March | 96,700 | 35,100 | 8,700 | 8,800 | |
| Tons | 1,361,200 | 1,660,200 | 1,202,900 | 706,400 | |
| Total | | | | | |

(a) Include exports on Government account, namely, 94,357 tons in May, and 240,952 tons in June, 190,293 tons in July, 30,483 in August, and 2,375 tons in September 1915

WAR AND TRADE.

of imports, exports, and re-exports amounted to Rs. 189.27 crores as against Rs. 109.17 crores

[illegible]

The amount of goods entered at ports in British Possessions with cargoes during the month of April to October 1915, amounted to 7,557,927 tons, and the tonnage cleared during the same period was 7,572,122 tons.

Summary Table showing the Value of Imports and Exports of London Merchandise of Exports of Indian Merchandise and of Total Exports for each month in the two previous years and for the completed months of the current year.

| | IMPORTS | | | EXPORTS | | |
|--------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 1913-14 | 1914-15 | 1915-16 | 1913-14 | 1914-15 | 1915-16 |
| April | Rs. 15,04,15,524 | Rs. 14,49,03,703 | Rs. 9,27,00,000 | Rs. 12,11,12,12 | Rs. 12,11,12,12 | Rs. 12,11,12,12 |
| May | 14,30,51,001 | 14,58,96,000 | 9,12,12,771 | 12,11,12,12 | 12,11,12,12 | 12,11,12,12 |
| June | 12,22,43,850 | 12,68,10,583 | 10,30,52,016 | 12,11,12,12 | 12,11,12,12 | 12,11,12,12 |
| July | 14,17,01,327 | 14,00,30,230 | 11,11,11,111 | 12,11,12,12 | 12,11,12,12 | 12,11,12,12 |
| August | 16,13,04,250 | 12,02,62,707 | 12,11,12,12 | 12,11,12,12 | 12,11,12,12 | 12,11,12,12 |
| September | 16,65,18,547 | 7,39,80,111 | 12,11,12,12 | 12,11,12,12 | 12,11,12,12 | 12,11,12,12 |
| October | 16,55,65,522 | 12,30,20,546 | 11,51,93,275 | 12,11,12,12 | 12,11,12,12 | 12,11,12,12 |
| INDIAN MERCHANDISE | | | | | | |
| April | Rs. 21,03,17,624 | Rs. 20,41,12,506 | Rs. 12,27,04,605 | Rs. 21,46,31,576 | Rs. 20,50,35,357 | Rs. 12,49,77,121 |
| May | 10,20,46,020 | 21,04,41,730 | 15,39,75,907(a) | 19,67,76,016 | 21,39,41,731 | 15,71,45,911(a) |
| June | 17,53,93,308 | 21,42,85,353 | 17,73,40,128(b) | 17,89,26,533 | 21,83,27,777 | 18,15,35,230(b) |
| July | 20,23,74,635 | 10,12,60,164 | 14,64,13,002(c) | 20,63,46,113 | 19,56,50,968 | 15,09,04,636(c) |
| August | 17,24,09,032 | 9,55,14,237 | 14,80,10,722(d) | 17,59,47,588 | 9,78,19,002 | 15,23,96,112(d) |
| September | 19,47,77,077 | 7,56,53,060 | 16,90,67,015(c) | 19,80,02,379 | 7,96,81,915 | 17,32,77,691(c) |
| October | 21,68,38,522 | 9,99,67,473 | 17,87,09,057 | 22,03,29,214 | 10,36,02,580 | 18,28,20,058 |

(a) Includes Rs. 1,20,50,910, being the value of wheat exported on Government account
 (b) Includes Rs. 3,24,15,620, being the value of wheat exported on Government account
 (c) Includes Rs. 1,87,52,680, being the value of wheat exported on Government account
 (d) Includes Rs. 44,46,330, being the value of wheat exported on Government account
 (e) Includes Rs. 2,94,092, being the value of wheat exported on Government account

Table showing the Value of Imports and Exports of Indian Merchandise of Exports of Indian Merchandise and of Total Exports for each month in the two previous years and for the corresponding months of the current year —

| | MERCANDISES | | | | INDUSTRIAL | | | |
|--|---------------|----------------------|----------------|---------------------|--------------------|--------------|-----|---------|
| | Imports | Exports
(Foreign) | | Exports
(Indian) | Exports
(Total) | Imports | | Exports |
| | | Rs. | Rs. | | | Rs. | Rs. | |
| (1) October 1914 | 11,51,91,251 | 11,11,001 | 17,87,00,057 | 18,28,20,008 | 63,82,800 | 10,34,750 | | |
| " " 1914 | 12,76,20,546 | 16,35,107 | 9,00,07,473 | 10,30,02,580 | 47,24,272 | 2,00,408 | | |
| (II) Seven months, 1st April to 1st October 1914 | 10,55,05,622 | 14,00,712 | 21,08,38,522 | 22,03,20,231 | 3,08,45,040 | 51,50,020 | | |
| " " 1915 | 76,06,071.5 | 2,61,87,162 | 1,00,08,30,510 | 1,12,30,17,081 (a) | 8,15,01,800 | 81,85,014 | | |
| Seven months, 1st April to 1st October 1914 | 874,79,846 | 2,08,40,077 | 1,09,12,40,113 | 1,11,70,80,300 | 14,33,13,285 | 2,76,53,503 | | |
| Seven months, 1st April to 1st October 1915 | 1,05,00,022 | 2,76,03,282 | 1,30,52,50,187 | 1,30,08,02,400 | 19,32,14,736 | 5,35,03,746 | | |
| Imports (+) or Decrease (—) in October 1915, compared with— | | | | | | | | |
| (i) October 1914 | 81,27,201 | +4,76,704 | +7,87,41,584 | +7,02,18,378 | +10,58,507 | +7,44,201 | | |
| (II) 1915 | —1,01,52,267 | +6,21,180 | —1,81,20,465 | —1,75,08,276 | —2,44,02,741 | —41,21,270 | | |
| Imports (+) or Decrease (—) in seven months, 1st April to 1st October 1915, compared with— | | | | | | | | |
| (i) Seven months, 1st April to 1st October 1914 | —10,48,62,601 | +5,38,085 | +55,90,206 | +50,28,201 | —6,18,11,416 | —1,94,07,880 | | |
| (II) Seven months, 1st April to 1st October 1915 | —26,41,05,807 | +5,83,880 | —26,84,28,608 | —26,78,44,788 | —11,17,12,807 | —4,54,08,132 | | |

(a) Includes Rs. 4,88,50,547 being the value of wheat exported on Government account

PASSPORT REGULATIONS.

Jamadar Mir Dost, I O.S., with Cooke's Rifles (F.F.) For most conspicuous bravery during the attack, and awarded collected various parties of the regiment (when no British safety whilst exposed to heavy fire

The following resolutions concerning pas-ports were issued in 1915 —

- The following regulations concerning passports were issued in 1915—
- 1 Applications for Indian Passports must be made in the prescribed form, and submitted, either direct or through the local authority, (a) in the case of a resident in British India, to the Local Government or Local Administration concerned, (b) in the case of a resident in a Native State, to the Agent to the Governor-General or Political Resident concerned.
 - 2 The charge for an Indian Passport is Re 1.
 - 3 Indian Passports are granted to—(a) Natural born British subjects, (b) wives and widows of such persons, (c) Persons naturalized in the United Kingdom in the British Colonies or in India, and (d) Subjects of Native States in India. A married woman is deemed to be a subject of the State of which her husband is for the time being a subject.
 - 4 Applications for Passports must not be made in the case of persons already abroad, such persons should be told to apply for Passports to the London Foreign Office or nearest British Mission or Consulate.
 - 5 Passports cannot be issued or renewed on behalf of persons already abroad, such persons should be told to apply for Passports to the London Foreign Office or nearest British Mission or Consulate.
 - 6 Small duplicate unmounted photographs of the applicant and wife, if to be included) must be forwarded with the application for a Passport, one of which must be certified on the back by the person verifying the declaration made in the application form.
 - 7 Indian Passports are not available beyond two years from the date of issue. They may be renewed, *in India only*, for four further periods of two years each after which fresh Passports must be obtained. The fee for each renewal is Re 1.
 - 8 Passports cannot be issued or renewed on behalf of persons already abroad, such persons should be told to apply for Passports to the London Foreign Office or nearest British Mission or Consulate.

DISTURBANCES IN PERSIA.

On October 23, the muskhi (clerk) and a ghulam (mounted servant) of the Consulate at Shitaz, were shot at and wounded. The ghulam died subsequently.

On August 25 the British and Russian Consuls at Kermanshah were returning to their posts from Hamadan, and were at Kangavar. The British Consul at Kermanshah with a force consisting of perhaps 200 men and two Majlans occupied the surrounding hills and informed the Governor that he would give three hours for the British and Russian Consuls to leave. Failing this he would attack the town. The Consuls were forced to withdraw to Hamadan, where upon the German and his forces left. The object of his attack was obviously to keep the Consulate at Kermanshah in a state of confusion. A report was afterwards received that H. M. Consul was afterwards driven into Derest.

On September 7 The Vice Consul died on September 8.

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TERRITORIAL TROOPS IN INDIA.

The following are the British units which arrived in India in 1914-15 in relief of the British troops who have gone to the front, together with the stations to which they have been posted —

Western Division

4th Duke of Cornwall's Light Infantry

(Lt.-Col. Smith), Bareilly

4th Devonshire Regiment (Lt.-Col. Acland

Troyle), Ferozepore

5th Devonshire Regiment (Lt.-Col. Hawker), Multan.

6th Devonshire Regiment (Lt.-Col. Rad-

cliffe), Lahore

South-western Infantry Brigade.

4th Somerset Light Infantry (Lt.-Col. Cox), Feshawar

5th Somerset Light Infantry (Lt.-Col. Cooke-

Hurle), Ambala

4th Dorsetshire Regiment (Lt.-Col. Baxter), Ambala.

4th Wiltshire Regiment (Major Armstrong), Delhi

Hampshire Infantry Brigade

4th Hampshire Regiment (Lt.-Col. Bowker), Poona

5th Hampshire Regiment (Lt.-Col. Burford

Hancock), Allahabad.

6th Hampshire Regiment (Lt.-Col. Playfair), Agra.

7th Hampshire Regiment (Lt.-Col. Parke), Meerut.

Field Artillery of Western Division

First Western Brigade

Commanding Lt.-Col. Powell

1st Hampshire Battery (Major Flowers), Lahore.

2nd Hampshire Battery (Major Cogswell), Feshawar

3rd Hampshire Battery (Major P. House), Lahore

Sydney Western Brigade

4th Hampshire Battery (Major Malcolmson), Lucknow

5th Hampshire Battery (Major Thompson), Lucknow

Third Western Brigade

Commanding Lt.-Col. Bedford Pinn

6th Hampshire Battery (Captain Carroll), Ambala

Wiltshire Battery, (Major the Earl of Suffolk), Delhi

Dorsetshire Battery (Major, Livingstone

Leamington), Bareilly

Fourth Western Brigade

Commanding Lt.-Col. Talbot

1st Devonshire Battery (Lt.-Col. Perowne), Allahabad.

2nd Devonshire Battery (Major Vickers), Dinapore

3rd Devonshire Battery (Major Arden), Barrackpore

Surrey Infantry Brigade

4th Royal West Surrey Regiment, Lucknow, (Lt.-Col. Cutler)

5th Royal West Surrey Regiment, Lucknow, (Lt.-Col. Brodick)

5th East Surrey Regiment, Nowshera, (Lt.-Col. Harvey)

6th East Surrey Regiment, Rawalpindi, (Lt.-Col. Dyson)

Ken Infantry Brigade

4th East Kent Regiment, Aden, (Lt.-Col. Gosling)

5th East Kent Regiment, Kamptee, (Lt.-Col. Munro-Jace)

4th Royal West Kent Regiment, Jubulpore, (Lt.-Col. C. N. Watney)

5th Royal West Kent Regiment, Jhansi, (Lt.-Col. Fraser)

Madagascar Infantry Brigade

9th Milledges Regiment, Dinapore, (Lt. Col. Blumfield)

10th Milledges Regiment, Fort William, (Lt.-Col. Diamond)

4th Border Regiment, Maymyo, (Lt.-Col. Watcrown)

1st Home Counties Brigade, R.F.A.

1st Sussex Battery, Mhow, (Major Hovers)

2nd Sussex Battery, Mhow, (Major Darke), 3rd Sussex Battery, Mhow, (Major Barton)

2nd Home Counties Brigade, R.F.A.

4th Sussex Battery, Rawalpindi, (Major Moss)

5th Sussex Battery, Mhow, (Major Johns)

6th Sussex Battery, Ferozepore, (Major Bradford)

3rd Home Counties Brigade, R.F.A.

1st Kent Battery, Jubulpore, (Major Carder)

2nd Kent Battery, Lucknow, (Capt Wise)

3rd Kent Battery, Jubulpore, (Major Denne)

The Indian "Sandhurst" — A Cadet College

is opened in 1915 at Quetta for the training

during the war, of cadets for the Indian Army

The qualifications of candidates are identical

with those prescribed for admission to the Royal

Military College at Sandhurst and are, briefly,

that candidates must be of English parentage

between the ages of 17 and 25 and accepted as

suitable in all respects to hold a commission in

the army. Entrance examinations are held in

London half-yearly for the usual examination

fees being allotted for the time being.

The successful competitors for the cadet-

ships in medical subjects are then sent to India

for a six months' course of training. The

part of expenditure of each cadet is required

to deposit the sum of £35 for the provision of

uniform, book, etc., and £3 monthly for pocket

money. Other expenses are paid by the Gov-

ernment. At the conclusion of the course, the

cadets, if suitable, are, under the order of the

Commander-in-Chief, posted with the rank of

2nd Lieutenant to units of the Indian Army.

Further information is to be found at page -

The Sir John Ambulance Association in India, which since the outbreak of the war has firmly established itself at the Red Cross Society of India, is controlled by an Indian Council under the Presidency of H. E. the Viceroy. The executive work is carried out by a small Executive Committee composed as follows—The Director-General, Indian Medical Service, the President of the Railway Board, the Director of Medical Services in India the Private Secretary to the Viceroy, the Surgeon to the Viceroy, a Representative of the Education Department, a Representative of the Foreign Department, the General Secretary, the Treasurer.

Lieutenant-Colonel R. J. Blackham, C.I.F. V.H.S. has carried on the work of Hon. General Secretary in addition to his military duties for seven years. In November 1914 he was seconded by the War Office for duty as the Secretary of the Association in India. The Association has accommodations offices at Simla and Delhi and accompanies the Government of India in its moves from the Summer to the Winter capitals. It has a large Depot for distributing Ambulance Stores at Bombay, and since the outbreak of the War the Indian Council has established a War Gifts Depot also at Bombay for the receipt and despatch of Red Cross gifts. This Depot dealt with comforts and gifts to the value of upward of eight lakhs (£50,000) during the first ten months of the war.

ments and all other details can be obtained on application to the Military Secretary, India Office, London or to the Chief of the General Staff Simla. The complete scheme of training cadets in India comprises, in addition to the college at Quetta, a college at Dehra Dun and one for candidates for the cavalry at Sangor in London on February 22, 1916, and following days at which there will be open to competition—100 cadships at the Training College at Quetta, India (for the Indian Army), less such number as may be awarded to King's Cadets, King's India Cadets, or Honorary King's India Cadets. Forms of application will be furnished on application by letter addressed to the Secretary, Civil Service Commission, Burlington Gardens, London, W. The forms should be completed and forwarded to the Secretary, Civil Service Commission.

The first batch of 99 joined at Quetta in May, and in November the commandant reported that 95 gentlemen cadets were at Quetta to receive commissions. The course of six months' instruction at these colleges embraces drill, musketry, minor tactics, military history and strategy, physical training, riding, military engineering, military shooting and reconnaissance. The first law, and almost daily instruction in

WIRELESS TELEGRAPHY.

graphy in has official capacity at the expense of Government no licence is required, only executive permission, which may be given so far as the Telegraph Department is concerned by the Director-General, Posts and Telegraphs

(2) When an officer carries on experiments as a private individual at his own expense he must obtain a licence. If the approval of the military authorities is required to what he proposes to do he should obtain such approval before the Director-General, Posts and Telegraphs, is approached. The licence will then be submitted by the Director-General, Posts and Telegraphs, for the sanction of the Government of India.

(3) With reference to the above, attention is drawn to the necessity for applying for licences to own and use wireless telegraphy apparatus of installations, experimental or otherwise. Applications for such licences will be submitted through the Chief of the General Staff and will contain particulars regarding the apparatus showing (a) system it is proposed to employ, (b) manufacturing range of signalling to be used, (c) the apparatus, (d) source of power (current and voltage).

The annual report of the Indian Telegraph Department for 1914-15 states—The total number of wireless stations rose from 17 to 18 of which 10 were coast stations open for general public communication with ships at 65,538. The coast stations dealt with 65,538. The number of all kinds is compared with 70,526 in 1913. The number exchanged with ships in 1914 was 6,112 as against 5,902 in the preceding year. New stations were opened at Secundrabad, Madras and Lamoon and the stations at Port Blair and the Bay of Islands (Port Blair, Diamond Islands and Victoria Point) were opened. The wireless telegraph is still extensively employed in commerce and industry throughout the country. The only serious drawback to the use of wireless telegraph is the difficulty of atmospheric conditions which is still experienced in some parts of the country.

Licences to Officers—The Government of India has decided that the granting of licences to officers in respect of the apparatus used for experimental purposes will be subject to the sanction of the Chief of the General Staff and will contain particulars regarding the apparatus showing (a) system it is proposed to employ, (b) manufacturing range of signalling to be used, (c) the apparatus, (d) source of power (current and voltage).

Racing, in India.

Calcutta.

King-Emperor's Cup Distance 1 mile —
 Mr R R S's Bachelor's Wedding (9st 3lbs), F Templeman
 Mr W Bartlett's Eveit (9st), W Huxley
 H H Rajah Sir Ranbir Singh's Jacamar (9st 3lbs), Trenoweth

Viceroy's Cup Distance 1½ miles —
 H H General Vazirabad Obaidulla Khan's Killioi (9st 3lbs), Bowley
 Mr R S's Bachelor's Wedding (9st 3lbs), F Templeman
 Mr W Bartlett's St Andrews (9st 3lbs), Firth
 Mr Goculdas' Knight's Key (8st 11lbs), Whalley

Governor's Cup Distance Race Course —
 Mr Bartlett's St Andrews (7st 8lbs, carried 7st 12lbs), Hardy
 Mr Ever's Midland (6st 12lb, carried 6st 13lbs), Lynch
 Zemindar of Nazirgunj's Miss Drake (7st 6lbs), Vincent
 Mr R R S's Work Girl (8st 2lbs), F Brown

Prince of Wales Plate Distance 1 mile —
 H H the Kour Sahib of Patiala's Lesoleil (8st 2lbs), Templeman
 Mr Bartlett's St Andrews (8st 3lbs), Hardy
 Mr R R S's Kempton (9st 3lbs), F Brown
 Mr Whaddens' Watch Tower (7st 7lbs), Vincent

Grand Annual Distance 2 miles, over 8 furlongs —
 Mr Goculdas Politian (10st 3lbs), A Hoyt
 Mr R. Dawson's Dolly Dimple (9st 10lbs), Williamson
 Zemindar of Nazirgunj's Canberra (11st 3lbs), F Ferguson
 Mr T Ferguson's Bellower (9st carried 9st 11b), Northmore

The Metropolitan Distance 6 furlongs —
 Mr Goculdas' Polish (9st) Ruiz
 Thakur Shri Lal Singh's Middevera (7st 9lbs, carried 7st 10lbs), A. Kumbh
 Mr R R S's Kempton (9st 11b), F Brown
 Mr Bartlett's Santa Barbara, FitzGibbon
 Macpherson Cup Distance St Leger Course —
 Mr Goculdas' Matchlock (8st 3lbs), Ruiz
 Mr Kelso's Cherrywood (7st 9lbs), Kai-phoroo

Mr R R S's Bachelor's Wedding (9st 11lbs), F Brown
 Mr R R S's Work Girl (8st 4lbs), Firth
 Merchants' Plate Distance 1½ mile —
 Mr Bartlett's St Andrews (8st 11lbs), Hardy

Mr Goculdas' Matchlock (8st 12lbs), Ruiz
 Mr Evers' Midland (7st 7lbs), Lynch
 Mr Chowdhury's Milliner (7st 13lbs), W Southall
 International Pony Plate Distance 7 furlongs —
 Mr J D Scott's Sea Lad, F Templeman
 Mr Goculdas' Symptoms (8st 12lbs), Whalley
 Major Holden and Mr J D Scott's Lady (9st 7lbs), W Huxley
 Mr R Powell's Go On (9st 3lbs), Firth

Cooch Behar Cup Distance 1½ miles —
 Mr Goculdas' Matchlock (8st 2lb, carried 8st 3lbs), Ruiz
 Mr De Souza's Valouane (8st 7lbs, carried 8st 8lbs), Trenoweth
 Mr T Scott's Cider (9st 3lbs), A Kuhn
 Mr Thadens' Wayward and Wild (7st 4lbs), Lynch

Burdan Cup R C and distance over seven furlongs or hurdles —
 Mr M Goculdas' Politian (9st 7lbs), A Hoyt
 Zemindar of Nazirgunj's Canberra (11st 3lbs), F Ferguson
 Messrs R Pugh and H Ophert's Testo (9st 7lbs), Northmore
 Mr J D Scott's Proprietor (9st 10lbs), Mr Rodrick

Indian Grand National Distance about 3 miles —
 Mr Curtis Hayward's Pilot (9st 6lbs, carried 9st 10lb), Mr Bush
 Mr R A C Pugh's Dynavor Park (9st 8lbs), Northmore
 Mr A L Butler's Sholto (10st 11lb), F Ferguson
 Mr L Walker's Tommy Daw (9st 7lbs), McNeillage

Tollygunge Plate Distance 3 miles —
 Mr Butler's Better Butt (9st 7lb, carried 9st 8lb), Mr Rodrick
 Mr Walker's Shunting Sand (9st 2lb), Mr Evers
 Major Walker's Kewstond (9st 7lb), Mr D Scott's Sea Lad (9st 9lb), Bartlett
 Tollygunge St. Leger Plate I, J, K, L, M, N, O —
 Mr Hart's Exchange (9st 7lb), W O

Mr T M Thaddeus' Wayward and Wild (9st), Bowley
The Civilian and Military service Plate Dis-
tance 1 mile —
Lieut Col R Lanneca's Delusion (8st),
Lieut Col A S Arnold's Lucy Gitters
(late Rifle) (9st 3lbs), Yard Singh
Lieut Col A S Arnold's Anarchist (8st
12lbs), A Ferguson
The Bangalore Cup Distance 1 1/2 mile —
Mr D B Caplain's sugar Loaf (9st 5lbs),
Melson
Mr J C Galstann's Scotch Plaid (7st
10lbs), Kalkooshroo
Mr M Goudas' Double Chin (9st 12lbs),
A Hoyt
Mr W Goudas' Pretty Good Sort (9st
10lbs), Bowley
Lahore at Lahore —
Major Holme's Barmaid (6st 2lbs, carried
1st 8lbs), Southall
Mr Fleming's Sahana (1st 7bs), Trahan 2
Sardar Jewan Singh's Fortunate Lady (7st
13lbs, carried 8st 7bs), Quim
Lahore Cisarwath —
Capt Meynell's Silver Memory (8st 5lbs,
carried 8st 12bs), Quim
Capt Welden's Lark Lodge (8st, carried
8st 7bs), Trahan
Captins Cheape and Wilbott's Rats Eat
(8st 11bs, carried 9st 4bs), Kandall 3
Mawdot Cup Distance 1 mile —
Rajah sahib of Pattala's Housemaid (9st
5lbs carried 9st 7bs), Quim
Miss Kirpott's Flame (9st 3lbs carried
9st 8bs) Bal Kerran
Mr Nizamuddin's Chamberl (9st 3lbs),
Jager
Lieutenant Governor's Cup Distance 1 mile —
Mr R T Clark's Vigorous (9st 4lbs,
carried 9st 8bs) Melson
Capt Bruce's Floradora (10st 10lbs,
carried 10st 2bs), Capt Waghae
Mr Sydney Smith's Acorn (9st 10lbs
carried 9st 8bs), Mr Holland
Ranbir Cup Distance 6 furlongs —
Mr Sydney Smith's Happy Days (8st
10lbs), Durga
Capt S O Robinson's Gwen (9st 10lbs
carried 10st), Crowden
Sardar Jewan Singh's Mavouneen
(10st 3lbs, carried 10st 7bs),
Trahan
Sardar Soogan Singh's Mesalliance
(8st 7bs), Thabar
Dead heat

Mr T M Thaddeus' Wayward and Wild —
Distance 6 furlongs —
Sardar Jewan Singh's Hymn (9st 11bs)
Northmore
Sardar Jewan Singh's Nazor (8st 11bs)
Barrett
Mr Division's Vii Baba (8st 9bs) Trahan 3
Mr Division's Vii Baba (8st 9bs) Trahan 3
A Southall
Royal Calcutta Turf Club Handicap Distance
7 furlongs —
Sardar Jewan Singh's Maces (8st 11bs),
Trahan
Col Menden's Ditching Mistress (7st
9bs), J Southall
Mr the Rajah Sir Ranbir Singh of Puli-
ala's Vicar (10st 10bs), Quim
Inchram Cup Distance 1 mile —
Mr the Rajah Sir Ranbir Singh's Mii
(9st 13bs), W Southall
Sardar Jewan Singh's Morning (7st 11bs),
Melson
Col Menden's Mistress (8st
7bs), Trahan
Pattala Cup Distance 1,000 y rds —
Mr H Skinner's Brandy II (8st 11b),
E Skinner
Sardar Jivan Singh and Jasant Singh's
Old Joe (7st 11bs), W Southall
Col Menden's Mount (7st 3bs), Trahan 3
Ranbir Cup Distance 1 mile —
Sardar Jivan Singh's Maces (1st), Trahan 1
Captain Calmes and Welden's Lark Lodge
(6st 13bs, carried 7st 2bs), Abadi
Winded
Mr H Seed's Pats' Pelt (8st) Crowden
Pattala Cup Distance 1,000 yards —
Raja sahib of Pattala's Little Wonder
(8st 5bs), J Southall
Captain Mervyn Owen's Miss Zena (8st
5bs), Crowden
Sardar Jivan Singh's Miss Lily (8st 2bs),
Trahan
Puma Lili Cup Distance 1,000 y rds —
Sardar Dyal Singh Chhachhi's Old Joe
(8st 5bs), Trahan
Captain Kennedy's Nayami (8st 7bs),
Crowden
Kour Sarann Singh's Imperial (7st 12bs),
J Southall
The Maharajah of Mysore's Cup Distance
1 mile —
Mr D B Caplain's Sugar Loaf (8st 11b),
Melson
A Hoyt
Mr Zeminadar of N Ferguson's Mrs Drake
(9st 11bs), A Ferguson

Punjab Cup —
 Captain Beatty's Virago (10st 5lbs carried)
 1st 12lbs) Owner
 Captain Fuller's Blue Boy (9st 10lbs)
 carried 9st 7lbs), Owner
 The 37th Lancers' Rumour (10st 5lbs),
 Abdu
Merchant's Cup Distance 6 furlongs —
 Major Grant's and Mr (quinn Young's
 1st 12lbs) Karim
 2nd 12lbs) Karim
 3rd 12lbs) Karim
 Major P Gould's Smacker (9st 5lbs carried)
 2nd 12lbs), Trahan
 Captain Mostyn Owen's Miss Zenia (6st
 12lbs carried 7st 2lbs), Nelson

Rangoon.

It is in Rangoon Derby —
 Winning Po Poko's Phumy in Vincent
 1st 12lbs) Phumy in Vincent
 2nd 12lbs) Phumy in Vincent
 3rd 12lbs) Phumy in Vincent
 Winning Po Poko's Phumy in Vincent
 1st 12lbs) Phumy in Vincent
 2nd 12lbs) Phumy in Vincent
 3rd 12lbs) Phumy in Vincent
 Winning Po Poko's Phumy in Vincent
 1st 12lbs) Phumy in Vincent
 2nd 12lbs) Phumy in Vincent
 3rd 12lbs) Phumy in Vincent

Secunderabad.
 Grand Annual Hurdle Handicap Distance
 2 miles —
 First Venture (12st 12lb-), Hardly
 1st 12lbs) Hardly
 2nd 12lbs) Hardly
 3rd 12lbs) Hardly
 Captain Giff (11st), Mr Scott
 1st 12lbs) Mr Scott
 2nd 12lbs) Mr Scott
 3rd 12lbs) Mr Scott
 Captain Giff (11st), Mr Scott
 1st 12lbs) Mr Scott
 2nd 12lbs) Mr Scott
 3rd 12lbs) Mr Scott
 Captain Giff (11st), Mr Scott
 1st 12lbs) Mr Scott
 2nd 12lbs) Mr Scott
 3rd 12lbs) Mr Scott

Kirkc.
 Foxes and Barrels Hunt Cup Distance 1
 1st 12lbs) Foxes and Barrels
 2nd 12lbs) Foxes and Barrels
 3rd 12lbs) Foxes and Barrels
 Captain Giff (11st), Mr Scott
 1st 12lbs) Mr Scott
 2nd 12lbs) Mr Scott
 3rd 12lbs) Mr Scott
 Captain Giff (11st), Mr Scott
 1st 12lbs) Mr Scott
 2nd 12lbs) Mr Scott
 3rd 12lbs) Mr Scott

Karachi

Mr A. R Dabhe's Victory (8st 12lbs),
 Ebrahim
 2nd 12lbs) Ebrahim
 3rd 12lbs) Ebrahim
 Mr Sheikh Ismail's Alimay (7st 12lbs),
 Alifed
 1st 12lbs) Alifed
 2nd 12lbs) Alifed
 3rd 12lbs) Alifed
 Mr Yakoob Zuhair's Pharaoh (8st 5lbs,
 carried 8st 5lbs), Alifed;
 Mr Stearid's Lord Satu (9st 6lbs), Mr
 Harrison
 1st 12lbs) Harrison
 2nd 12lbs) Harrison
 3rd 12lbs) Harrison
 Mr A. B Zuhair's Kassum (7st 8lbs),
 Ebrahim
 1st 12lbs) Ebrahim
 2nd 12lbs) Ebrahim
 3rd 12lbs) Ebrahim
 Mr P Malsac's Arabian Consul (8st),
 Alifed
 1st 12lbs) Alifed
 2nd 12lbs) Alifed
 3rd 12lbs) Alifed
 Mr A. Hazany's Present (9st 4lbs),
 Alifed
 1st 12lbs) Alifed
 2nd 12lbs) Alifed
 3rd 12lbs) Alifed
 Mr L. Hazany's Jingle (9st 4lbs), Lb-
 rahim

Quetta.

Grand National Handicap —
 Mr G Steer's Lady Godiva (10st 7lbs),
 Owner
 1st 12lbs) Owner
 2nd 12lbs) Owner
 3rd 12lbs) Owner
 Mr G Steer's Lady Godiva (10st 7lbs),
 Owner
 1st 12lbs) Owner
 2nd 12lbs) Owner
 3rd 12lbs) Owner

Barackpore.

Burnackpore Cup Distance 7 furlongs —
 Mr Bhuvan's Lady Doris (8st 12lbs),
 Williamson
 1st 12lbs) Williamson
 2nd 12lbs) Williamson
 3rd 12lbs) Williamson
 Mr Gistw's Molibby (9st 11lb-), Owner
 1st 12lbs) Owner
 2nd 12lbs) Owner
 3rd 12lbs) Owner

Madras.

Government's Cup —
 Major Osman Sale's Ambrey
 1st 12lbs) Ambrey
 2nd 12lbs) Ambrey
 3rd 12lbs) Ambrey
 Major Osman Sale's Ambrey
 1st 12lbs) Ambrey
 2nd 12lbs) Ambrey
 3rd 12lbs) Ambrey

Mysore.

It is the Mysore and has in 1910
 been no race, were held in 1910

Sequence

1997

111115

ព្រឹត្តិបត្រ

— 1000000 (1000000) —

— Friendship —

649

Sequence

1997

111115

ព្រឹត្តិបត្រ

— 1000000 (1000000) —

— Friendship —

649

Bombay.

Western India Tournament—

Singles—Ranga Rao beat N. R. Naoraji

Men's Doubles—England and Kemble beat

J. A. D. Naoraji and Engineer

Mixed Doubles—England and Mrs. Nelson

Lafayette Cup—

R. D. England beat T. A. Kemble

Condon Tournament—

V. V. Bhadkambar and R. A. Wigle beat

Karte and B. Modi.

Coonor.

Ladies' Cup—

Mrs. J. C. Bain

Henderson's Cup—

Starts first 1 Parselle

*Open Tournament (Annual)—

Mixed Doubles—Mrs. P. Plumer and Capt. Plumer beat Mrs. P. Harvey and Major Brown

Men's Doubles—Major Brown and Mr. Parselle beat Messrs. Sabaseva Rao and R. V. Krishnaswamy Iyer of Madras

Ladies' Doubles—Mrs. D. Harvey and Mrs. Pearce beat Miss Simpson and Miss McLeod

Men's Singles—J. Parselle beat Major Brown

Matheran

Mathern Tournament—

Men's Singles—Mr. Judhow beat Mr. England

Mixed Doubles—Mrs. England and Mr. Kemble beat Mr. and Mrs. W. Reid

Ladies' Singles—Mrs. England beat Mrs. W. Reid

CRICKET

Bombay, March Week—

1 England (Lord Willmington's side) defeat-

ed India by an innings and 203 runs

(Major J. G. (Travis) scored 216 and

captain R. O. (Goldie 101)

2 Hindus draw with Parsis (lost 100-100)

Hindus' first innings—50, Parsis' first

innings—270 (second innings—216 for loss

of five wickets) (Mr. P. Vithal scored

101, Mr. S. M. (Mothia 91 not out,

Mr. V. V. (Kartik 91)

Qualifying Tournament (Poona)—

1 Hyderabad Europeans beat Hindus in the

final match by 10 wickets—

2 Parsis beat

Parsis beat Parsis in (Poonab)—

3 Parsis beat Parsis in (Poonab)—

4 Parsis beat Parsis in (Poonab)—

5 Parsis beat Parsis in (Poonab)—

6 Parsis beat Parsis in (Poonab)—

7 Parsis beat Parsis in (Poonab)—

8 Parsis beat Parsis in (Poonab)—

9 Parsis beat Parsis in (Poonab)—

10 Parsis beat Parsis in (Poonab)—

HOCKEY

Colin Chalmers shield (Junior)—

Chhatar C. C. beat Railway R. C. by 77 runs

Gretnar Cup—

Bahadlin College (Jumagadh) beat the

Baroda College by an innings and 239

runs

Northcote Shield (Dombay)—

St Xavier's College beat the

College by 159 runs

Weston Tournament (Xaini Tal)—

Allyp, East and Present, beat the Hamp

shire Regiment

Xaini Tal Gym Tournament—

The Secretariat

St Joseph's College 'A'

Dangalore Gymkhana Tournament—

7th Hussars

St Joseph's College

South Police Tournament—

Hardoi Police Team

1 National Cup (Clementia)—

Lucknow

Madhya Pradesh—

Hockey, St. C. C.

Pratibha V. C. C.

Mr. J. F. Lutz, Jr., President
Mr. D. B. Shuck, Vice-President
Mr. J. A. Williams, Secretary

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(The following information was obtained from the records of the FBI, New York Office, dated 6-8-70.)

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MARCH.

from British measures for dealing with con-
tributors.
13th—Sir James Begg called for England
on retiring from his position as Secretary and
Treasurer of the Bank of Bombay

Bombay Legislative Council. Bridge Meeting at the Secretariat, Bombay, H. E. the Governor presiding. The Hon Sir Richard Lamb presiding the Financial Statement, which showed that the war had affected provincial finances less than Imperial finances. The Financial Statement having been formally presented, the Government Mr G. K. Gokhale addressed for the day out of respect for the late Mr G. K. Gokhale

Budget meetings of the Punjab, United Provinces, Central Provinces and Burma, Legislative Councils

13th—Bombay Legislative Council Budget debate The Hon Mr Parnani withdrew the Bill to consolidate and amend the law relating to the formal recognition of heirs executor and administrators and the appointment of the administrators of property by the Courts in the Bombay Presidency stating that the Bill as it emerged from Select Committee was very similar to the Succession Certificate Act of 1887 and was withdrawn on the opinion of the High Court and other officials. A Bill to authorize the levy of dues on vessels for the provision of lights on the coast or for the province of Sind, was read a third time

At a meeting of the Senate of the Galatla University, the following resolution which had been adopted by the Synagogue was presented for approval: "That the University of Galatla views with the strongest abhorrence and condemnation all acts and practices during the present war having the effect of intensifying the cruelties and sufferings inseparable from a state of war and which are in violation of moral and international obligations and leading to the destruction of millions of innocent human beings or to the and other risks to culture progress and civilization." Consideration was postponed.

16th—If the Government formally opened the Bombay Cities and Town Planning Exhibition at the Bombay Town Hall

Emergency Legislative Council. The Bill to decentralize and otherwise to facilitate the administration of Bombay was passed through the President of Bombay was passed through second and third readings. The Hon. Mr. C. W. Mills introduced a bill to amend the Bombay Protection of Plaintiffs Act. The Bill was read for the first time and referred to Select Committee. The Hon. Mr. A. C. Patel moved a resolution recommending consideration of the establishment of a committee consisting of the Government of the United Provinces, Official Revenue and Official Liquidator. The motion was carried.

Sir William Majeur introduced the Budget estimate for the ensuing year. He gave an exhaustive review of the effects of the war in India and announced that there would be no increase in taxation.

The Bombay Municipal Corporation gave a dinner in the Municipal Council Hall in celebration of their jubilee. H. E. the Governor and Lady Willington were the principal guests.

4th—H. F. the Viceroy opened the Sarai Baidi, inaugurating direct railway passenger communication across the Lower Gangetic bridge was named the H bridge. The Viceroy proceeded later to Calcutta and in the afternoon reached stations of Lord Ripon and Lord Minto upon the Midlan

5th — A public meeting was held in the Brown Hall to give a tribute to the late Hon. Mr. K. K. Kothakota. If the governor presided. If the Viceroy proposed a resolution regarding this in the deep sense of loss by Mr. Kothakota's death and its impact on the country.

[illegible]

form—If the Viceroy inspects the new-
born of Calcutta Scottish Volunteer Corps
this will be paid in Calcutta University and
conveyed to the Government of India
to the Government of India

[illegible][illegible]

Chronicle of the year 1475.

The House of Lords adopted Lord Selkirk's resolution advising His Majesty the King to appoint Mr. Graham as a member of the Imperial Legislative Council. The Hon. Mr. Caird then expressed his pleasure in the appointment of Mr. Graham as a member of the Council. The Hon. Mr. Caird then moved the adjournment of the House of Lords.

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1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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This image shows a document page with a grid-like structure, likely a ledger or a form. The page is filled with numerous small, dark, horizontal lines and markings, which appear to be data entries or text. The overall appearance is very noisy and high-contrast, making the individual details difficult to discern. The layout suggests a structured format with multiple columns and rows.

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25th—The report was issued of the committee appointed in July, 1914, to frame a scheme for the teaching type in Nagpur, or in its neighbourhood, and for the affiliation of colleges situated in other parts of the Central Provinces and Berar. The University which the committee proposed would possess powers entitling it to a high place in the administrative machinery of the Provinces. A measure of financial independence and the committee framed proposals accordingly. The measure is commended that the University should contain in its constitution faculties of medicine, law and science, and a department for the training of teachers subordinate to the Arts, Law and Science, and a department for the training of Arts.

26th—H. B. the Governor of Bengal laid the foundation-stone of the new building of the University Institute in Calcutta which was started twenty years ago for giving moral training to young men.

18th—The heavy rain of the monsoon broke in Bombay.

20th—The P. & O. steamer Subi grounded on the bar at the mouth of the Kelant in the morning. The passengers were safely taken off and a quantity of cargo was thrown overboard in order to lighten the ship. Efforts to save the vessel continued during several days, but were unsuccessful.

23rd—It was announced that Sir Edward Galt had been appointed Lieut. Governor of Bihar and Orissa.

24th—It was announced that in response to a request by the Imperial Government, the Government of India had undertaken to supply munitions of war for use in Europe, and that for this purpose a new Department had been created for the period of the war with Mr. Balfour, Military Assistant Secretary to the War Office.

25th—It was announced that Sir Edward Galt had been appointed Lieut. Governor of Bihar and Orissa.

6th—There reached India a vivid account by an official eye-witness of the great battle of Neuve Chapelle, giving the first connected account of the work of the Indian regiment.

10th—News was received in Bombay by cable from London of the death of Mr. Cradock, late Governor in the firm of Cradock, Blair and Co., solicitors of Bombay.

11th—The English mail for India left London by the route, Folkestone, Boulogne and Harwich, thus marking the resumption of an overland route for the Anglo-Indian mail service in both eastward and westward direction.

14th—The Government of India published their annual review on irrigation, which showed that twenty-five million acres were being irrigated and that eighty-one crores worth of crops were in the past year raised on the area thus made fertile.

15th—An official announcement by the Secretary of State for India was issued in which it was stated that the University of Calcutta should contain in its constitution faculties of medicine, law and science, and a department for the training of teachers subordinate to the Arts, Law and Science, and a department for the training of Arts.

JULY

1st—The report was issued of the committee appointed in July, 1914, to frame a scheme for the teaching type in Nagpur, or in its neighbourhood, and for the affiliation of colleges situated in other parts of the Central Provinces and Berar. The University which the committee proposed would possess powers entitling it to a high place in the administrative machinery of the Provinces. A measure of financial independence and the committee framed proposals accordingly. The measure is commended that the University should contain in its constitution faculties of medicine, law and science, and a department for the training of teachers subordinate to the Arts, Law and Science, and a department for the training of Arts.

2nd—H. B. the Governor of Bengal laid the foundation-stone of the new building of the University Institute in Calcutta which was started twenty years ago for giving moral training to young men.

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 130. *Chlorophyll axz* (Chl *axz*)
 131. *Chlorophyll ayz* (Chl *ayz*)
 132. *Chlorophyll ayz* (Chl *ayz*)
 133.

1. The first group of people who are likely to be affected by the proposed changes are those who are currently employed in the public sector. This group includes civil servants, teachers, nurses, and other public employees. They will be affected by changes in the way that public services are delivered, and by changes in the way that public employees are paid and managed.

1. *Chlorophyll a* (Chl *a*)
 2. *Chlorophyll b* (Chl *b*)
 3. *Chlorophyll c* (Chl *c*)
 4. *Chlorophyll d* (Chl *d*)
 5. *Chlorophyll e* (Chl *e*)
 6. *Chlorophyll f* (Chl *f*)
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 8. *Chlorophyll h* (Chl *h*)
 9. *Chlorophyll i* (Chl *i*)
 10. *Chlorophyll j* (Chl *j*)
 11. *Chlorophyll k* (Chl *k*)
 12. *Chlorophyll l* (Chl *l*)
 13. *Chlorophyll m* (Chl *m*)
 14. *Chlorophyll n* (Chl *n*)
 15. *Chlorophyll o* (Chl *o*)
 16. *Chlorophyll p* (Chl *p*)
 17. *Chlorophyll q* (Chl *q*)
 18. *Chlorophyll r* (Chl *r*)
 19. *Chlorophyll s* (Chl *s*)
 20. *Chlorophyll t* (Chl *t*)
 21. *Chlorophyll u* (Chl *u*)
 22. *Chlorophyll v* (Chl *v*)
 23. *Chlorophyll w* (Chl *w*)
 24. *Chlorophyll x* (Chl *x*)
 25. *Chlorophyll y* (Chl *y*)
 26. *Chlorophyll z* (Chl *z*)
 27. *Chlorophyll aa* (Chl *aa*)
 28. *Chlorophyll ab* (Chl *ab*)
 29. *Chlorophyll ac* (Chl *ac*)
 30. *Chlorophyll ad* (Chl *ad*)
 31. *Chlorophyll ae* (Chl *ae*)
 32. *Chlorophyll af* (Chl *af*)
 33. *Chlorophyll ag* (Chl *ag*)
 34. *Chlorophyll ah* (Chl *ah*)
 35. *Chlorophyll ai* (Chl *ai*)
 36. *Chlorophyll aj* (Chl *aj*)
 37. *Chlorophyll ak* (Chl *ak*)
 38. *Chlorophyll al* (Chl *al*)
 39. *Chlorophyll am* (Chl *am*)
 40. *Chlorophyll an* (Chl *an*)
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1. *Chlorophyll a* (Chl *a*)

17th - The Laphet went ashore in the night at Sokotra during a voyage from Saigon to Marseilles, and five hundred and eighty five passengers were rescued by the steamer City of Saigon and taken to Colombo

18th - The special Tribunal in the Lahore Conspiracy Case pronounced judgment showing that in 1913 Indian Government officials were sent into a state of hostility towards the British Government and in furtherance in India. The conspiracy and preparation fully developed at the end of 1913 and beginning of 1914. A very large number of men set out from America to India and were coming to August 1914. In informed it various places in the East. In August 1914, a number of men with documents and money were passed on the road to India. The British Government was informed of the matter and sent a large force to India. The British Government was informed of the matter and sent a large force to India.

19th - The Punjab Legislative Council met at Simla and H. H. the Lieut Governor made an important speech reviewing the recent political disturbances in the Punjab and paying a tribute to the loyalty and behaviour of the mass of the people.

20th - The Punjab Legislative Council met at Simla and H. H. the Lieut Governor made an important speech reviewing the recent political disturbances in the Punjab and paying a tribute to the loyalty and behaviour of the mass of the people.

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14th—The Hon. Sir William Macer met the Municipal Council at Simla by the Simla

13th—The Hon. Sir William Macer met the Municipal Council at Simla by the Simla

12th—The Hon. Sir William Macer met the Municipal Council at Simla by the Simla

11th—The Hon. Sir William Macer met the Municipal Council at Simla by the Simla

10th—The Hon. Sir William Macer met the Municipal Council at Simla by the Simla

9th—The Hon. Sir William Macer met the Municipal Council at Simla by the Simla

8th—The Hon. Sir William Macer met the Municipal Council at Simla by the Simla

7th—The Hon. Sir William Macer met the Municipal Council at Simla by the Simla

6th—The Hon. Sir William Macer met the Municipal Council at Simla by the Simla

5th—The Hon. Sir William Macer met the Municipal Council at Simla by the Simla

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INTEREST TABLE

1 Box 5 to 12 PER CENT ON RUPEES 100

(Estimated for 1 Year 1 Month (Calendar) 1 Year 1 Day (365 Days to Year), the Demand for a Pie for the Day being shown for the Day

| Interest | 1 Year | 1 Month | 1 Year |
|----------|--------|---------|--------|
| 1 | 12 | 12 | 12 |
| 11 | 11 | 11 | 11 |
| 10 | 10 | 10 | 10 |
| 9 | 9 | 9 | 9 |
| 8 | 8 | 8 | 8 |
| 7 | 7 | 7 | 7 |
| 6 | 6 | 6 | 6 |
| 5 | 5 | 5 | 5 |
| 4 | 4 | 4 | 4 |
| 3 | 3 | 3 | 3 |
| 2 | 2 | 2 | 2 |
| 1 | 1 | 1 | 1 |

1st—A previously arranged a cricket match between sides captained respectively by H. E. the Governor and H. H. the Maharaja of Pithia, the latter representing England and the latter India, the players being selected in both cases from all over India. The Indian team won the toss and batted first.

12th—The cricket match, England vs India, in Bombay resulted in a win for the English team by an innings and 263 runs. After play, H. H. the Governor offered H. H. the Maharaja of Nawanganagar a cricket ball. The Governor's bat and the cricket balls used in the game for sale by auction H. H. the Maharaja of Pithia bought the bat for Rs. 2,500 and the five balls sold separately, realised a total sum of Rs. 742.

13th—Death at Bombay at the age of 56 of Mr. Louis Joseph Dhanraj Petit millowner and Mr. Louis Joseph Dhanraj Petit millowner and millionaire.

14th—The second match of the Bombay cricket season, which was between the Parsees and the Hindus ended in a draw after an exciting finish. The Women's Branch of the Bombay Presidency War and Relief Fund in aid of which the cricket were inaugurated, benefited by about Rs. 30,000.

15th—The Governor of Bombay Lady Willingdon and party left Bombay for a tour.

16th—The twenty-ninth session of the Indian Social Conference assembled in Bombay, from D. K. Karve, presiding.

17th—The eighth session of the All-India Moslem League opened in Bombay, Mr. Mazhar ul Haque, presiding.

18th—The twelfth All India Temperance Conference was held at Bombay.

19th—The second day's proceedings of the All Moslem League were marked by scenes of rowdism, which resulted in the adjournment of the meeting until the next day, when it was held at the Taj Mahal Hotel and attendance was limited to the members of the League only.

20th—The P. & O. Company's steamer *Persia* bound from London to Bombay, was sunk by an enemy submarine in the Mediterranean, off the coast of Greece. Out of 231 passengers and crew, mostly Indians, only 166 were saved. The passenger list included the names of Mr. P. M. Coleman, Director of Bennett Coleman & Co. Ltd. Proprietors of the *Times of India* and his son Mr. V. M. Coleman.

21st—The All India Mahanadan Education Conference met at Poona the Hon. Mr. Justice Abdur Rahman, presiding.

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23rd—The sitting of the Legislative Assembly of the Government of India, at Calcutta, on the 24th of the month, passed a resolution regarding the loyalty of the people of India to the British Government and their willingness to give the Empire. Another begged for a further extension of Lord Hardinge's term as Viceroy. Sir S. P. Sinha, in his Presidential address reiterated the claim of Indians to self-government, declared his faith that under British rule it would be given to them as a matter of evolution and urged co-operation with Government in working out the process of development.

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For values of Rupees from 18 3½d to 18 3¼d

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For many years Indian time was in a state of chaotic confusion. What was called Madras or Railway time was kept on all the railways and each great centre of population kept its own local time which was not based on any common scientific principle and was divorced from the standards of all other countries. It was with a view to removing this confusion that the Government of India took the matter up in 1904, and addressed to the Local Governments, and through them to all local bodies, a letter which reviewed the situation and made suggestions for the future. The essential points in this letter are indicated below.

In India we have already a standard time, which is very generally, though by no means universally, recognised. It is the Madras local time, which is kept on all railway and telegraph lines throughout India and which is 5h 21m 10s in advance of Greenwich. Similarly, Kangaroo local time is used upon the railways and telegraphs of Burma, and is 6h 24m 47s ahead of Greenwich. But neither of these standards bears a simple and easily remembered relation to Greenwich time.

The Government of India have several times been addressed by Scientific Societies both in India and in England, and urged to fall into line with the rest of the civilised world. And now the Royal Society has once more returned to the Committee of that Society which advises the Government of India upon matters connected with its observations with "The Committee think that a change from Madras time to that corresponding to a longitude exactly 5 1/2 hours east of Greenwich would be an improvement upon the existing arrangements but that for international scientific purposes the hourly interval in making the time 5 hours in advance of Greenwich in the west, and 6 hours in advance of the east, would be preferable.

Now if India were connected with Europe by a continuous railway system, all of which had adopted the European time, it would be imperative upon India to conform and to adopt the same time as the rest of the world. But as she is not, and is as much isolated by unconnected States as by the ocean, it is open to her to follow the example of that and some other similarly situated colonies and to adopt the West Indian time.

It is believed that this will be the better solution. There are obvious objections to the arbitrary line right across the Indian and most populous portions of India, and so as to be at the main lines of communication and keeping it differing by an hour from the time of that line India has been advised to conform to a uniform standard in the time of the railways and the sub-stations for it is a double tankard would appear to be a great step while it would in all probability be strongly opposed by the railway authorities. Moreover, it is very desirable that a uniform time should be adopted by all Europeans and Indians alike and it is certain that the double standard would be a source of much confusion.

It is certain that the double standard would be a source of much confusion. It is very desirable that a uniform time should be adopted by all Europeans and Indians alike and it is certain that the double standard would be a source of much confusion.

possesses one of the first alternatives, that under the former, the difference between local and standard time can never exceed half an hour whereas under the latter it will even exceed an hour in the extreme cases of Karachi and Quetta. But this inconvenience is believed to be smaller than that of keeping two different times on the Indian system of railways and telegraphs. It is proposed, therefore, to put on all the railway and telegraph clocks in India 5h 30s. They would then represent a time 5 1/2 hours faster than that of Greenwich, which would be known as Indian Standard Time. The difference between standard and local time at the places mentioned below would be approximately as follows, the figures representing minutes, and F and S meaning that the standard time is in advance of or behind local time respectively.—Dibrugarh 51 S, Shillong 38 S, Calcutta 24 S, Allahabad 2 F, Madras 9 F, Lahore 33 F, Bombay 39 F, Peshawar 44 F, Karachi 62 F, Quetta 62 F.

"This standard time would be as much as 4 1/2 and 5 1/2 minutes behind local time at Mandalay and Kangaroo, respectively, and since the railway system of Burma is not connected with that of India, and already keeps a time of its own, namely, Kangaroo local time, it is not suggested that Indian Standard Time should be adopted in Burma. It is proposed, however, that instead of using Kangaroo Standard Time as at present, which is 6h 24m 47s in advance of Greenwich, a Burma Standard Time should be adopted on all the Burmese railways and telegraphs which would be one hour in advance of Indian Standard Time, or 6 1/2 hours ahead of Greenwich time, and would correspond with the change would be 57° 30' E longitude. The change would bring Burma time into simple relation, both with European and with Indian time, and would (among other things) simplify telegraphic communication with other countries.

"Standard time will thus have been fixed for railways and telegraphs for the whole of the Indian Empire. Its general adoption for all purposes while eminently advisable, is a matter which must be left to the local community in each case. It is difficult to recall, without a sense of bewilderment, the reception of this proposal by various local bodies. To read now the letters that were entertained if Standard Time was adopted is a study in the possibilities of human error. The Government scheme left local bodies to decide whether or not they would adopt it. Calcutta decided to retain its own local time, and to day Calcutta time is still twenty-four minutes in advance of Standard Time. In Bombay the first reception of the Chamber of Commerce decided in favour of it opposing element in the Municipality brought in a side resolution, by which the Municipal clock were put at Bombay time which is thirty-nine minutes behind Standard Time. On the 1st January 1906 all the railway and telegraph clocks in India were put at Indian Standard Time, in Burma the Burma Standard Time, but some universal Calcutta retains its own local time, but in Bombay local time is retained only in the clocks which are maintained by the Municipality and in the establishments of some orthodox Hindus. Elsewhere standard Time is universal.

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| Rs 2 | In case of a re-insurance by one Company with another— $\frac{1}{2}$ of duty payable in respect of the original insurance, but not less than 1 anna, or more than 1 R. |
| 0 0 5 | Power of Attorney— |
| 0 0 5 | For the sole purpose of procuring the registration of one or more documents in relation to a single transaction or for admitting execution of one or more such documents |
| 0 0 5 | When required in suits or proceedings under the Presidency Small Causes Courts Act, 1882 |
| 0 0 5 | Authorising 1 person or more to act in a single transaction other than that mentioned above |
| 1 0 | Authorising not more than 5 persons to act jointly and severally in more than 1 transaction, or generally |
| 5 0 | Authorising more than 5 but not more than 10 persons to act |
| 10 0 | When given for consideration and authorising the Attorney to sell any immovable property—the same duty as a Conveyance for the amount of the consideration |
| 0 0 5 | In any other case, for each person authorised |
| 1 0 | Protest of Bill or Note |
| 0 1 | Proxy |
| 0 1 | Receipt for value exc Rs 20 |
| 0 1 | Shipping Order |
| 0 1 | Surrender of Lease—When duty with which lease is chargeable does not exceed Rs 5—The duty with which such Lease is chargeable |
| 5 0 | In any other case |
| 0 5 | Transfer of Shares—One Half of the duty payable on a Conveyance for a consideration equal to the value of the share |
| 0 5 | Transfer of any Interest secured by a Bond, Mortgage-deed, or Policy or Insurance—If duty on such does not exceed Rs 5—The duty with which such Bond, etc., is chargeable |
| 0 5 | In any other case |
| 0 5 | Transfer of Lease by way of assignment and not by way of under-lease—The same duty as a conveyance for a consideration equal to the amount of the consideration for the transfer |
| 0 5 | Trust, Declaration of—Same duty as a Bond for a sum equal to the amount or value of the property concerned, but not exceeding |
| 15 0 | Reversion of—Ditto, but not exceeding |
| 10 0 | Ind |
| 0 4 | 11 anna for 600 Rs. |

| | |
|------|---|
| Rs 2 | Letter—Allotment of share |
| 0 1 | Credit |
| 0 1 | License |
| 10 0 | Memo of Association of Company—If accompanied by Articles of Association |
| 15 0 | If not so accompanied |
| 40 0 | Notarial Act |
| 1 0 | Note or Memo, intimating the purchase or sale— |
| 0 2 | (a) Of any Goods exceeding in value Rs 20 |
| 0 2 | (b) Of any Stock or marketable security exceeding in value Rs 20—subject to a maximum of Rs 10 a 1 for every Rs 10,000, or part |
| 0 8 | Note of Protest by a ship's Master |
| 2 8 | Partnership—Where the capital does not exceed Rs 500 |
| 10 0 | In any other case |
| 5 0 | Resolution of |
| 0 5 | Policy of Insurance— |
| 0 1 | (1) Sea—Where premium does not exceed rate of 2s, or 1 per cent of amount insured |
| 0 1 | In any other case for Rs 1 500 or part thereof |
| 0 1 | (2) For time—for every Rs 1 000 or part insured, not exc 6 months |
| 0 2 | Exceeding 6 and not exceeding 12 months |
| 0 1 | If drawn in duplicate, for each part—Half the above rate, for sea and fire |
| 0 8 | (3) Fire—When the sum insured does not exceed Rs 5,000 |
| 1 0 | In any other case—for the maximum on any receipt of a premium on any receipt of an original policy—One half of the duty payable in respect of the original policy in addition to the amount, if any, chargeable under Art 25 (a) (ii) |
| 0 1 | Accident, or Loss—Against |
| 0 1 | Particular accident, valid for a single journey only |
| 0 1 | In any other case—for the maximum amount which may become payable in the case of any single accident or loss—Rs 1 000, and also where the amount does not exceed Rs 1 000, for every Rs 1,000 exc Rs 1 |
| 0 2 | Life, or other Insurance, not special |
| 0 4 | 11 anna for 600 Rs. |

[illegible]

The Calendars.

A full calendar will be found at the beginning of this book. Below are given details of the other Calendars in use in India.

The *Jewish* Calendar is in accordance with the system arranged A.D. 358. The Calendar dates from the Creation, which is fixed as 4,760 years and 3 months before the beginning of the Christian Era, the year is luni solar.

The *Mohammedan*, or era of the Hejira, dates from the day after Mohammed's flight from Mecca which occurred on the night of July 12, 622 A.D. The months are lunar calendars.

The *Sunvat* era dates from 57 B.C., and is luni-solar. The months are divided into two fortnights—*sadi*, or bright, and *badhi*, or dark. Each fortnight contains 15 tithis, which furnish the dates of the civil days given in our calendars.

PUBLIC HOLIDAYS IN 1916.

| Parsee (Shenshab) | | Hindu | |
|-------------------|------------------|---------------|-----------|
| March 21 | Vihar Sankranti | January 11 | January |
| April 19 | Maha Shivratri | March 2 | March |
| May 17 | Holi | April 19 | " |
| June 18 | Ram Navami | April 11 | April |
| September 8 | Gokal Ashtami | August 21 | August |
| October 9 | Ganesh Chaturthi | September 1 | September |
| November 11 | Dussehra | October 6 | October |
| December 16 | | October 27 | " |
| Parsee (Kadmi) | | Jewish. | |
| March 19 | Adar Shani | April 18 | April |
| April 21 | Adar Shani | June 7 | June |
| May 17 | Adar Shani | August 8 | August |
| June 10 | Adar Shani | September 28 | September |
| August 9 | Adar Shani | October 20 | October |
| September 10 | Adar Shani | November 12 | November |
| October 11 | Adar Shani | December 27 | December |
| November 12 | Adar Shani | | |
| December 17 | Adar Shani | | |
| Mahomedan (Sunni) | | Jain | |
| January 18 | Shab-e-Mirad | April 15 | April |
| June 17 | Shab-e-Mirad | August 26 | August |
| August 1 | Shab-e-Mirad | September 20 | September |
| November 6 | Shab-e-Mirad | October 20 | October |
| December 9 | Shab-e-Mirad | November 12 | November |
| Mahomedan (Shiah) | | Samarvat Sany | |
| January 5 | Shab-e-Mirad | February 20 | February |
| February 20 | Shab-e-Mirad | March 10 | March |
| March 10 | Shab-e-Mirad | April 15 | April |
| April 15 | Shab-e-Mirad | May 15 | May |
| May 15 | Shab-e-Mirad | June 15 | June |
| June 15 | Shab-e-Mirad | July 15 | July |
| July 15 | Shab-e-Mirad | August 15 | August |
| August 15 | Shab-e-Mirad | September 15 | September |
| September 15 | Shab-e-Mirad | October 15 | October |
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| November 15 | Shab-e-Mirad | December 15 | December |

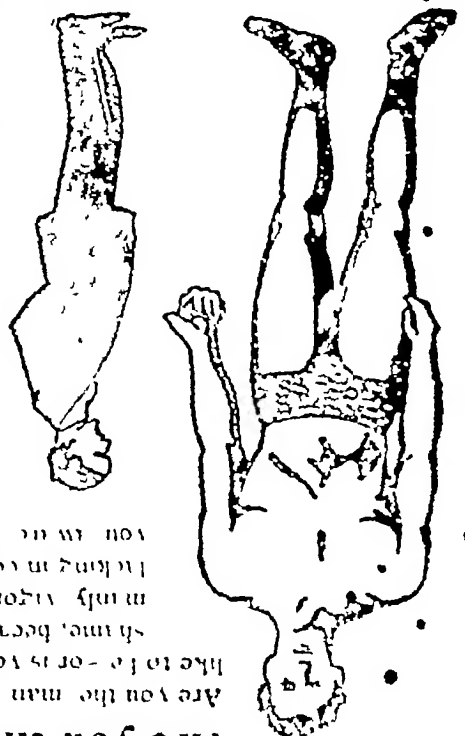
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| | | | |
|--|------------|---------------------------------------|----------|
| Calcutta Port Trust | 439 | Central Provinces and Berar hospitals | 68 |
| — racing | 673 | — industries | 65 |
| Calendars | 702 | — irrigation | 224 |
| Cambay | 97 | — judicial Dept | 559 |
| Campbell, Sir Colin (Colonel) | 9 | — land system | 65 |
| Canadian Baptist Mission | 517 | — languages | 65 |
| — Presbyterian | 518 | — Local Boards | 66 |
| Canals and Navigation | 225 | — Medical Service | 68 |
| — Soldiers | 230 | — Municipalities | 68 |
| — inundation | 268 | — Native States under | 108 |
| — irrigation | 268 | — officials | 68-69 |
| Canal, (Chenab) | 225 | — police | 67 |
| — colonies | 226 | — revenue | 67 |
| — Gangas | 9 | — toll | 65 |
| — Jhelum | 225 | — University scheme | 67 |
| — Lower Sutlej | 225 | — Societies | 455 |
| — Rates | 225 | — Ceylon Chamber of Commerce | 351 |
| — Sarda Ganges Jammu | 225 | — and India railway | 213 |
| — via Jaggur | 618 | — and India General Mission | 521 |
| — surz | 225 | — emigration to | 362 |
| — system, Punjab | 224-5, 227 | — map of | 212 |
| Canning, Lord | 9 | — taken | 153 |
| — (Capital account) | 173 | — tea | 305 |
| — a recultural | 207 | — Chamber State | 105 |
| — invested in tea | 306 | Chamber, Indian Merchants' | 346 |
| — country | 173 | Chambers of Commerce, see Commerce | 342 |
| — the New | 629 | Chamberlain, Austen, Secy of State | 23 |
| — plan of | 631 | Chandernagar | 114 |
| — urbanities | 421 | Chandragupta, Emperor | 2 |
| — Lardabur, Malabar | 431 | Chaplain | 610 |
| — (Sect weaving) | 320 | — Church of England | 513, 513 |
| — (Sect) | 371 | — Scotland | 512, 513 |
| — Lark, Punjab | 49 | Character Act, new | 6 |
| — Catholic Churches, Roman | 514 | Chenab Canal | 225 |
| — Little | 272 | Chenab Colony | 226 |
| — Lardar, Sir Louis | 11 | Chesques cleared, 1901-1914 | 262 |
| — Canton, in-structure at | 136 | Chess | 631 |
| — Central Asian Mission | 521 | Chief Commissioners of Provinces | 72 |
| — railways | 453 | — Assam | 50 |
| — Banks (Tables) | 454 | — Burma | 531 |
| — Bombay | 454 | — Officers, salaries of | 147 |
| — Indian Agency | 90 | — Tea | 305 |
| — Hills Mission | 521 | China Opium Agreement | 117 |
| — Central Provinces and Berar Adminis- | 66 | Chinese Consul | 138 |
| — Agriculture | 65 | — in Tibet | 138 |
| — art | 65 | Chitral | 11 |
| — Hill Commissioners | 66 | — campaign | 444 |
| — Collectors | 66 | Chittagong Port | 429 |
| — Courts of Justice | 65 | — Cholera, nature | 429 |
| — development of | 65 | — prevention | 429 |
| — Education | 65 | — treatment | 429 |
| — Inclusion | 65 | Christian education, effects of | 510 |

100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200

100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200

| | | | |
|--|-----|-------------------------------------|----------|
| Commerce, Chambers of, Madras | 348 | Conspiracy case, Lahore | 15 |
| — Punjab | 349 | Constants, tidal | 658 |
| — S India | 349 | Constitution of India Office | 24 |
| — U P | 349 | Consuls, Foreign, in India | 147 |
| Commercial Congress, Indian | 349 | Consumers' Home Society | 504 |
| Commission, Co-operation | 334 | Contracts, Railway | 205 |
| Commissioners, Bengal Presidency | 449 | Contributions to Navy (table) | 166 |
| — Currency | 195 | — famine | 446-7 |
| — Education | 388 | — (war) from princes | 667 |
| — Effects of, on Education | 388 | Convict employment | 566 |
| — Indentured Labour | 468 | Cooch-Behar State | 102 |
| — Irrigation | 222 | Cooper lawa tenants | 680 |
| — Public Services | 480 | Co-operation Commission, 1904 | 449 |
| — Punjab | 50 | — and Central Banks | 465 |
| Commissions, Famine | 446 | — first scheme | 449 |
| — progress in rural (tables) | 452 | — urban (tables) | 453 |
| — Burma | 56 | Co-operative Agricultural Societies | 451 |
| — Chief, of Assam | 72 | — Non-Agricultural | 453 |
| — Chief, Burma | 60 | — Credit Societies Act, 1904 | 450 |
| — Madras | 37 | — Societies, financing rural | 454 |
| — Punjab | 50 | — loans to | 458 |
| — Divisional, Bihar and Orissa | 61 | — management of | 451 |
| — (Fowler) Currency | 105 | — Mysore | 82 |
| — Lord Ampthill's Advisory | 474 | — store | 456 |
| — Nicholson | 169 | — typical | 456 |
| — State Technical Scholarship | 474 | — unions | 455 |
| — Weights and Measures | 340 | — urban | 458 |
| — Commission, Famine | 446 | — variety of | 451 |
| — Georgia | 84 | — education | 403 |
| — Hyderabad | 81 | — Copper | 317 |
| — Mysore | 83 | — coinage | 187 |
| — Punjab | 80 | — Cornwallis, Lord | 7 |
| — Company, Last India | 5 | — and Civil Service | 479 |
| — Administration transferred | 10 | — on Sepoys | 159 |
| — first formed | 16 | — Coroners | 355 |
| — Congress, Shareholders | 124 | — Cosmas root | 431 |
| — Conference Association, Indian Railway | 204 | — Costa Rican Consul | 147 |
| — Congressional Mission | 519 | — Cotton, cultivation of | 270, 274 |
| — Congress, Indian Commercial | 34 | — Duties Act, Indian | 249 |
| — National | 486 | — exports of | 287 |
| — British Committee | 459 | — Bires in Bombay | 293 |
| — Constitution of | 457 | — Industry statistics | 287-292 |
| — first session | 480 | — Japanese market | 287 |
| — foundation | 456 | — manufactures, figures | 287-8 |
| — results | 453 | — excise duty | 292 |
| — National session described | 487 | — exported | 288 |
| — progress of | 456 | — progress of | 291 |
| — Indian subjects | 393 | — wages in | 347 |
| — first session of | 131 | — Trade Association (Bombay) | 347 |
| — varieties of | 403 | — varieties of | 274, 282 |

THE

OF

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THE

| | | | | |
|----------|-------------------------------------|----------|--|--------------|
| 184 | Debt, Rupee | 184 | Development of N W Frontier Prov | 69 |
| 180, 183 | —Sterling | 180, 183 | —railway since 1900 | 207 |
| 554 | Declaratory Act, 1780 | 554 | Dhar State | 91 |
| 120 | Declaman, General | 120 | Dharwar Agency | 97 |
| 629 | Delhi and its environs | 629 | —Mines | 316 |
| 632 | —architectural style of | 632 | Dholpur State | 89 |
| 430 | —"boll" | 430 | Dhrangadhra State | 98 |
| 633 | —cathedral schemes | 633 | Digitalis | 430 |
| 632 | —Chief Commissioner appointed | 632 | Dir State | 94 |
| 630 | communications | 630 | Disciples of Christ Missions | 621 |
| 633 | cost of building | 633 | Disease, Famine and | 358 |
| 28 | —district | 28 | Diseases | 419 |
| 13 | Durbat | 13 | —Tropical | 421 |
| 633 | —landscape on | 633 | Dispensaries, Hospitals and Asylums | 420 |
| 631 | —map of new capital | 631 | Distinguished Service Medal, Indian | 652 |
| 135-6 | —Muling at | 135-6 | Distribution of population | 355 |
| 630 | —northern site report | 630 | —Trade | 244 |
| 679 | —point to point races | 679 | District administration | 410 |
| 9 | —siege of | 9 | Boards Bihar and Orissa | 61 |
| 629 | —site, of new capital | 629 | —Punjab | 61 |
| 629 | Town Planning Report | 629 | —United Provinces | 46 |
| 428 | Dengue (dandy) fever | 428 | Collectors | 29 |
| 510 | Denomational schools | 510 | Judges | 569 |
| 19, 606 | Department, Archaeological | 19, 606 | Magistrates | 29, 556, 609 |
| 19 | —Army | 19 | —Bengal Pres | 39 |
| 19 | —Botanical | 19 | —Monopoly Excise System | 178 |
| 276 | —Civil Veterinary | 276 | —Officer, the | 29 |
| 19 | —Commerce and Industry | 19 | —Officers, Bihar and Orissa | 63 |
| 19 | —Education | 19 | —Police, Bombay Pres | 38 |
| 18 | —Finance | 18 | Districts, N W Frontier Prov | 68-70 |
| 18 | —Foreign | 18 | —United Provs | 4-8 |
| 19 | —Geological Survey | 19 | Disturbances in Persia | 070 |
| 19 | —Home | 19 | Div, Island of | 172 |
| 18 | —Industry and Commerce | 18 | Divisional Commissioners, Bihar & Orissa | 60 |
| 19 | —Legislative | 19 | Divisions, Administrative | 30 |
| 188 | —Paper Currency | 188 | Dockyards, Royal Indian Marine | 168 |
| 19 | —Post Office | 19 | Dogras | 159 |
| 416 | —Public Health | 416 | Dominion, beginnings of British | 5 |
| 19 | —Public Works | 19 | —Feroze | 5 |
| 19 | —Railway Board | 19 | Dongarpur State | 87 |
| 18 | —Revenue and Agricultural | 18 | Dorjell at Lhasa | 137 |
| 19 | —Salt Revenue | 19 | Dornahal Mission (native) | 620 |
| 19 | —Survey | 19 | Drainage | 417 |
| 19 | —Telegraph | 19 | Dravidians, history of | 362 |
| 6 | —Department, India Office | 6 | Dress Industries | 379 |
| 233 | Deposits, Govt, in banks | 233 | Drugs, cultivation of | 430 |
| 60 | Deputy Collectors, Bihar and Orissa | 60 | —exercise systems | 177 |
| 29 | —Commissioners of Districts | 29 | —native | 430 |
| 45 | —Landed Proprietors | 45 | Dues, irrigation | 225 |
| 331 | —Liquor and Inventions | 331 | Dufferin, Lord | 11 |
| 639 | —Liquor of snuff, &c | 639 | —Fund, Councils of | 463 |
| 35-6 | —Liquor of Burma | 35-6 | Duncan, John and Education | 383 |
| 61 | —Liquor of India | 61 | Duplex | 0, 151 |
| 1 | —Liquor of Java | 1 | Durbat at Delhi | 13 |

Dutch Reformed Church (American) Mission
 Duties, Civil servants
 Import
 Railway Board's
 Dysentery

Early marriages

Earnings of railways (diagrams)

Earthquake

East India Company

Indian Railway

India Squadron

Eastern Bengal Railway

Ecclasiastical Dept., Assam

Bengal Pres

Bihar and Orissa

Bombay Pres

Burma

Central Provs

Madras Pres

W Frontier

Punjab

United Provinces

Establishments

Lebanon

Economic effects of immigration

Evangelical

Eden, Garden of

Education

Assam

Haroda

Haroda

Haroda

Haroda

Haroda

Haroda

Haroda

Haroda

Haroda

Haroda

Haroda

Haroda

Haroda

Haroda

Haroda

Haroda

Gaols
Garden of Eden
Gates to India
Gauges, railway
Gautkhaman Consul
Gem stones
General Staff formed
Geological Survey appointments
— Dept
German Evangelical Synod Mission
Germany, India and war with
— and Constantinople
— and Indian frontiers
— and Persian Gulf
Gillespie, Colonel
Girls' schools
Glasses and glassware
Glossary, Indian
Goa
Goats
Gokhale, death of Mr
Gold, absorption of
— and silver imports
Coinage
— production of
— reserve fund
— standard reserve
Gold in India, 1915
— at Calcutta
Gondal State
Goodfellow, 1901-14
Gorringe, General
Gough, Lord
— Sir Hugh
Government and district boards
— Bengal
— Bihar and Orissa
— Bombay
— Central Provs and Berar
— Madras
— United Provinces
— Punjab
— and the cultivator
— and banking
— business procedure
— control of railways
— districts (table)
— local
— Municipalities in India
— of India

Page

566
117
135
204
148
318
474
518
141, 143
1, 14
116
115
153
394
298
622
110
272
15
181
278
187
316
190
197, 190, 170
681
681
Gurkha War
Gurkhas
Gwalior State
Guthrie
Great Indian Peninsula Railway
Greek Consul
Ground nut
Guano, fish
Guano, oil
Guarantee, Govt, on railways
Gulf, Persian, and Germany
— and Turkey
Gun-running in Persian Gulf
Gupta Dynasty
Gurkha War
Gurkhas
Gwalior State
Habitual Amur
Hall-marking of plate
Handloom weavers
— Salvation Army and
Hardinge Bridge
— Lady, death of
— Lord
— Life attempted
Harsing, Emperor
Hasting, Marquis of (Lord Moira)
— Warren
— and education
Health and food
— Dept, Public
— In the tropics
— of Army
Heat stroke

H

Government paper
— personnel
— railway profits
— revenue
Governments, local
— Provincial
— trend of
Governor-General's Council
— Secretariat Depts
— staff
Governors General of Fort William
— India
— of Bengal
— Bombay
— Madras
— of provinces
Grain elevators
— lines, railway
— V. Roberts' Assocn
Graphite
Great Indian Peninsula Railway
Greek Consul
Ground nut
Guano, fish
Guano, oil
Guarantee, Govt, on railways
Gulf, Persian, and Germany
— and Turkey
Gun-running in Persian Gulf
Gupta Dynasty
Gurkha War
Gurkhas
Gwalior State
Habitual Amur
Hall-marking of plate
Handloom weavers
— Salvation Army and
Hardinge Bridge
— Lady, death of
— Lord
— Life attempted
Harsing, Emperor
Hasting, Marquis of (Lord Moira)
— Warren
— and education
Health and food
— Dept, Public
— In the tropics
— of Army
Heat stroke

Page

| | | |
|-----|--------------------------|-----|
| 722 | Hyderabad (India, cont.) | 122 |
| 723 | Hyderabad (India, cont.) | 123 |
| 724 | Hyderabad (India, cont.) | 124 |
| 725 | Hyderabad (India, cont.) | 125 |
| 726 | Hyderabad (India, cont.) | 126 |
| 727 | Hyderabad (India, cont.) | 127 |
| 728 | Hyderabad (India, cont.) | 128 |
| 729 | Hyderabad (India, cont.) | 129 |
| 730 | Hyderabad (India, cont.) | 130 |
| 731 | Hyderabad (India, cont.) | 131 |
| 732 | Hyderabad (India, cont.) | 132 |
| 733 | Hyderabad (India, cont.) | 133 |
| 734 | Hyderabad (India, cont.) | 134 |
| 735 | Hyderabad (India, cont.) | 135 |
| 736 | Hyderabad (India, cont.) | 136 |
| 737 | Hyderabad (India, cont.) | 137 |
| 738 | Hyderabad (India, cont.) | 138 |
| 739 | Hyderabad (India, cont.) | 139 |
| 740 | Hyderabad (India, cont.) | 140 |
| 741 | Hyderabad (India, cont.) | 141 |
| 742 | Hyderabad (India, cont.) | 142 |
| 743 | Hyderabad (India, cont.) | 143 |
| 744 | Hyderabad (India, cont.) | 144 |
| 745 | Hyderabad (India, cont.) | 145 |
| 746 | Hyderabad (India, cont.) | 146 |
| 747 | Hyderabad (India, cont.) | 147 |
| 748 | Hyderabad (India, cont.) | 148 |
| 749 | Hyderabad (India, cont.) | 149 |
| 750 | Hyderabad (India, cont.) | 150 |
| 751 | Hyderabad (India, cont.) | 151 |
| 752 | Hyderabad (India, cont.) | 152 |
| 753 | Hyderabad (India, cont.) | 153 |
| 754 | Hyderabad (India, cont.) | 154 |
| 755 | Hyderabad (India, cont.) | 155 |
| 756 | Hyderabad (India, cont.) | 156 |
| 757 | Hyderabad (India, cont.) | 157 |
| 758 | Hyderabad (India, cont.) | 158 |
| 759 | Hyderabad (India, cont.) | 159 |
| 760 | Hyderabad (India, cont.) | 160 |
| 761 | Hyderabad (India, cont.) | 161 |
| 762 | Hyderabad (India, cont.) | 162 |
| 763 | Hyderabad (India, cont.) | 163 |
| 764 | Hyderabad (India, cont.) | 164 |
| 765 | Hyderabad (India, cont.) | 165 |
| 766 | Hyderabad (India, cont.) | 166 |
| 767 | Hyderabad (India, cont.) | 167 |
| 768 | Hyderabad (India, cont.) | 168 |
| 769 | Hyderabad (India, cont.) | 169 |
| 770 | Hyderabad (India, cont.) | 170 |
| 771 | Hyderabad (India, cont.) | 171 |
| 772 | Hyderabad (India, cont.) | 172 |
| 773 | Hyderabad (India, cont.) | 173 |
| 774 | Hyderabad (India, cont.) | 174 |
| 775 | Hyderabad (India, cont.) | 175 |
| 776 | Hyderabad (India, cont.) | 176 |
| 777 | Hyderabad (India, cont.) | 177 |
| 778 | Hyderabad (India, cont.) | 178 |
| 779 | Hyderabad (India, cont.) | 179 |
| 780 | Hyderabad (India, cont.) | 180 |
| 781 | Hyderabad (India, cont.) | 181 |
| 782 | Hyderabad (India, cont.) | 182 |
| 783 | Hyderabad (India, cont.) | 183 |
| 784 | Hyderabad (India, cont.) | 184 |
| 785 | Hyderabad (India, cont.) | 185 |
| 786 | Hyderabad (India, cont.) | 186 |
| 787 | Hyderabad (India, cont.) | 187 |
| 788 | Hyderabad (India, cont.) | 188 |
| 789 | Hyderabad (India, cont.) | 189 |
| 790 | Hyderabad (India, cont.) | 190 |
| 791 | Hyderabad (India, cont.) | 191 |
| 792 | Hyderabad (India, cont.) | 192 |
| 793 | Hyderabad (India, cont.) | 193 |
| 794 | Hyderabad (India, cont.) | 194 |
| 795 | Hyderabad (India, cont.) | 195 |
| 796 | Hyderabad (India, cont.) | 196 |
| 797 | Hyderabad (India, cont.) | 197 |
| 798 | Hyderabad (India, cont.) | 198 |
| 799 | Hyderabad (India, cont.) | 199 |
| 800 | Hyderabad (India, cont.) | 200 |

| | |
|-----------------------------------|----------|
| Improvement Trust working classes | 438 |
| Improvements on holdings | 176 |
| Incidence of Revenue | 176 |
| of taxation | 409 |
| Income and wages (table) | 307 |
| tax | 179 |
| Interest of debt | 178 |
| Illiteracy | 375 |
| Indentured emigration | 467 |
| Labour | 468 |
| Statistics | 468 |
| Independent territory | 133 |
| India and Free Trade | 247-8 |
| and Ceylon | 212 |
| and the War | 660 |
| with Turkey | 620 |
| Diplomacy | 252 |
| Borrowing programme | 173 |
| Chief towns of | 409 |
| Clubs in | 508 |
| Companies formed | 16 |
| Consuls in | 147 |
| Council, Bill | 26 |
| Debt | 508 |
| Debt | 16 |
| Dockyards | 147 |
| Education | 383 |
| Emigration | 660 |
| Empire, area | 1 |
| Climate | 1 |
| Development | 1 |
| Intellectual revolution | 1 |
| Occupations of peoples | 367 |
| Order of the | 539 |
| People | 15, 332 |
| Population | 1, 332 |
| (Tables) | 355, 583 |
| Religions | 362-8 |
| Soil | 510 |
| Eccelesiastical establishments | 473 |
| Educational appointments | 448 |
| Famine Trust | 170 |
| Finance | 247 |
| Financial policy | 179 |
| Forests | 308 |
| Frontiers | 115 |
| Geological survey | 474 |
| Glass manufacture | 298 |
| Glossary | 620, 8 |
| Law, Europeans and | 380 |
| Learning, Macaulay and | 38, |
| Legislation, 102 | 575 |
| Loyalty in the War | 375 |
| Manners and customs | 600 |
| Marine, Royal | 167, 447 |
| Mathematical society | 303 |
| Medical Service | 481 |
| Merchandise Marks, etc. | 172 |

PAGE

Indian Association for Cultivation of

PAGE

[illegible]

| PAGE | | PAGE | |
|-------|-------------------------------|----------------|--|
| 374 | Jain education | 213, 334 | Inventions and Designs |
| 370 | Jainism | 430 | Jocacuanha |
| 108 | Jaintia Hills chieftship | 518 | Island Mission, Presbyterian Church of |
| 88 | Jajpur State | 315, 326 | Iron and Steel Works, Tata |
| 87 | Jaisalmer State | 315 | Iron production |
| 430 | Jalap root | 55 | Itanuddy Khottilla Co |
| 89 | Jalwar (Jhalwar) State | 229 | Irigated crops, value of |
| 99 | Jambhanda State | 221 | Irrigation |
| 84 | Jammu (Kashmir) | 40 | Jungla Pres |
| 99 | Jamuna | 32-3, 228 | Bombay Pres |
| 287 | Japanese cotton market | 58 | Burma |
| 225 | —Consul | 225 | —and navigation |
| 148 | Jats | 67 | —canals |
| 150 | Jats | 226 | Burma |
| 370 | Jews | 226 | —commission |
| 225 | Jhelum Canal | 222 | —colonies |
| 226 | —Colonv | 62 | —Central Provinces |
| 105 | Jind State | 227-52 | —Dept., Bihar and Orissa |
| 87 | Jodhpur State | 10 | —Funjab |
| 256 | Joint Stock Banks | 225 | —created |
| 266 | —enterprise | 225-6 | —ducs |
| 655-6 | Judges, District | 225 | —early practice of |
| 658 | Judicial Dept., Assam | 229 | —economic effects of |
| 656 | —Bengal Pres | 231 | —expenditure sanctioned |
| 657 | —Bombay Pres | 229 | —finance |
| 659 | —Burma | 224 228, 231-2 | —future of |
| 659 | —Central Provs | 221, 227 | —General account of |
| 658 | —Madras | 221 | —history of |
| 660 | —N W Frontier Prov | 268 | —Inundation canals |
| 666 | —Punjab | 36 | —Madras Pres |
| 660 | —United Provs | 225-6, 268 | —methods |
| 609 | —functions, executive and | 221 | —need of |
| 98 | Junagadh State | 72 | —N W Frontier Prov |
| 79 | Jurisdiction in Native States | 222 | —policy |
| 654 | Justice, administration of | 52 | —Punjab |
| 40 | —Bengal Pres Courts of | 203, 225 | —and railways |
| 554 | —Laws and | 228 | —revenue |
| 272 | —Justice, cultivation of | 228-9 | —State works (tabls) |
| 297 | —Dealers' Assocn, European | 225 | —tanks |
| 294 | —history of industry | 222, 223 | —Triplic Project |
| 296 | —looms (table) | 228 | —United Provinces |
| 207 | —Mills Association | 268 | —water rates |
| 297 | —working agreements | 225, 268 | —works, new |
| 207 | —trade and the | 223 | —Italy (C. and) |
| 148 | Juvenile prisoners | 321 | Ivory work |
| 567 | Kaiser-i-Hind medal | 560 | Jails |
| 97 | Kaira Agency | 567 | —population of |
| 646 | Kala Azar | 567 | — |
| 429 | Kalat | 567 | — |
| 85 | K | 567 | — |

| Page | Index | Page | Index |
|-------|--------------------------------|---------|---------------------------------|
| 512 | Madras Ecclesiastical Dept | 54 | Joint Governors of Punjab |
| 37 | Expenditure | 48 | United Provs |
| 36 | Exports | 330 | Life Insurance |
| 36 | Factories | 270 | Inseed, cultivation of |
| 446 | famine, 1866 | 375 | literacy, increase or |
| 504 | Fine Arts Society | 502 | Societies |
| 322 | Fisheries | 426 | Liver, abscess of |
| 38 | Governors of | 272 | Live stock |
| 36 | Imports | 453 | Loans, Co-operative Socy |
| 36 | Irrigation | 263 | Government |
| 223 | Judicial Dept | 180 | Jupsee |
| 558 | Legislative Council | 403-410 | Local Boards |
| 589 | Literary Society | 40 | Bengal Pres |
| 504 | Monerals | 62 | Dhar and Orissa |
| 30 | Municipality | 32 | Dombay Provs |
| 410 | natural productions | 65 | Central Provs |
| 36 | officials | 411 | expenditure |
| 37-8 | population | 171 | Govt revenue |
| 356 | Port Trust | 28 | Government |
| 443 | President of Fort St George | 16 | functions of |
| 31 | trading | 412 | statistics |
| 678 | railways | 411 | revenue |
| 211 | rainfall | 29 | Secretariats |
| 36 | revenue | 407 | Government |
| 37 | schools | 143 | London to India railway |
| 56 | States in | 518 | Missionary Socy Mission |
| 94 | Magadha, Ancient kingdom of | 290 | Loans, improved hand |
| 7 | Magistrates, Courts of | 137 | Land Revenue |
| 554 | District | 7 | Well-to-do's Police |
| 54-5 | Bengal Pres | 225 | Lower Sattal Canal |
| 40 | Native and Europeans | 375 | Loyalty, Indian |
| 554 | Nabab, Admiral on Persian Gulf | 420 | Lunatic asylums |
| 121 | Mah Kantha | 522-8 | Lunatic Asylums |
| 106 | Mahomedan kingdoms | 9, 136 | Lunacy, difference of residence |
| 4 | soldiers | 676 | — |
| 159 | University | | — |
| 406 | Mahomedanism | | — |
| 368 | Maharatta country states | | — |
| 152-5 | — | | — |
| 132 | Mahrattas | 183 | Quality on Indian education |
| 152 | character of | 83 | — |
| 11 | Maharaj, Battle of | 449 | — |
| 431 | Malaria, Cardamom | 450 | — |
| 492 | Malaria, causes | 50, 57 | — |
| 420 | — | 211 | — |
| 420 | — | 36 | — |
| 423 | — | 252 | — |
| 382 | Malaya, Emigration to | 6 | — |
| 106 | Malabar Kotia State | 18 | — |
| 30 | Malwa opium | 47 | — |
| 550 | Mammal Survey | 50 | — |
| 201 | Management of railway | 50 | — |
| 106 | Mandi State | 50-7 | — |
| 106 | Manganese industry | | — |

[illegible]

| | | | |
|----------|-----------------------------------|----------|--|
| 234 | Progress agricultural | 234 | Post Office tariff |
| 234 | educational (tables) | 234 | and Telegraph |
| 235 | mill industry | 235 | Postage rates, foreign |
| 234 | sanitary | 234 | letter |
| 235 | Project, Triple (irrigation) | 234 | parcels |
| 234 | Projects, irrigation | 234 | Posts and Telegraphs |
| 285 | Promissory notes | 285 | Power looms |
| 526 | Protection for India | 526 | Precedence, Table of |
| 518 | from Famine | 518 | Presbyterian Church of Ireland Mission |
| 518 | of tenants | 518 | N. Americas Mission |
| 518 | Protective tariff for India | 518 | Mission |
| 151 | Protestant Mission | 151 | Presbyterian Armies |
| 252 | Provinces, Chief Commissioners of | 252 | Banks |
| 412 | Governors of | 412 | Corporations |
| 33-4 | Lieut - Governors of | 33-4 | of Bombay Council |
| 36 | trade by | 36 | Fort St George |
| 36 | United | 36 | Madras |
| 409 | Provincial Councils, working of | 409 | towns |
| 28 | finance | 28 | Presidencies, administration of |
| 15 | governments | 15 | formed |
| 38 | trend of | 38 | Residents of Fort St George |
| 493 | salaries | 493 | Press Act, 1910 |
| 492 | Proving of Wills | 492 | citizenship |
| 492 | Public Health Department | 492 | in India |
| 480 | Service Commission | 480 | law, Indian |
| 493 | Trustee | 493 | statistics |
| 493 | Works Department | 493 | Veinicular |
| 11 | applied | 11 | Act repealed |
| 381 | Railway branch | 381 | Priety in it |
| 421 | Puduchottai | 421 | Primary schools |
| 392 | Pulicat Oyster Farm | 392 | Princ of Wales tour |
| 10 | Pulse cultivation of | 10 | Prisoners' employment |
| 566 | Punchayats | 566 | Private schools |
| 566 | Punjab administration | 566 | Production of Government business |
| 16 | annexed | 16 | Production of Empire of India |
| 10 | area | 10 | valing I dward |
| 12 | canal system | 12 | Produce agricultural |
| 269 | castes | 269 | Production of coal (table) |
| 314-5 | climate | 314-5 | in Bengal |
| 39 | colleges | 39 | gold |
| 316 | Chamber of Commerce | 316 | iron ore |
| 315 | Commission | 315 | Production of manganese ore |
| 314 | Commissioners | 314 | minerals (tables) |
| 317 | Courts of Justice | 317 | petroleum |
| 312 | District Boards | 312 | public |
| 304 | Ecclesiastical Department | 304 | tea |
| 311 | Education Department | 311 | timber |
| 289 | educational progress | 289 | various goods (table) |
| 379 | fisheries | 379 | varn |
| 394 | hospitals | 394 | Provisional education |
| 203 | irrigation | 203 | Provisional Government Railways |
| 272 | | 272 | |
| 385 | | 385 | |
| 280 | | 280 | |
| 415 | | 415 | |
| 228, 229 | | 228, 229 | |
| 231 | | 231 | |
| 263 | | 263 | |
| 240 | | 240 | |
| 448 | | 448 | |
| 177 | | 177 | |
| 249 | | 249 | |
| 474 | | 474 | |
| 28-9 | | 28-9 | |
| 28-9 | | 28-9 | |
| 28-9 | | 28-9 | |
| 28-9 | | 28-9 | |
| 44 | | 44 | |
| 246 | | 246 | |
| 28-9 | | 28-9 | |
| 497 | | 497 | |
| 19 | | 19 | |
| 475 | | 475 | |
| 475 | | 475 | |
| 95 | | 95 | |
| 328 | | 328 | |
| 270 | | 270 | |
| 407 | | 407 | |
| 50-51 | | 50-51 | |
| 50 | | 50 | |
| 9 | | 9 | |
| 49 | | 49 | |
| 49, 52 | | 49, 52 | |
| 50 | | 50 | |
| 52-53 | | 52-53 | |
| 349 | | 349 | |
| 50 | | 50 | |
| 60 | | 60 | |
| 63 | | 63 | |
| 61 | | 61 | |
| 61 | | 61 | |
| 613 | | 613 | |
| 53 | | 53 | |
| 307 | | 307 | |
| 325 | | 325 | |
| 111 | | 111 | |
| 63 | | 63 | |
| 52 | | 52 | |

Quetzal railway centre
—
—
Government seat of
—
—
—

Qleeh Alexandria's Military Nurseries

- Judicial Department
- Land Act
- languages
- lawa tenants
- Legislative Council
- Lieut. Governors
- Minerals
- Municipalities
- officials
- plaque in
- police
- population
- provincial police
- rainfall
- religions
- revenue
- schools
- soil
- et alia under
- textiles
- trade
- Unhappy uses of
- Pupils in Mission schools

452a

| | | | |
|------------------------------------|--------------|--|---------------|
| Highway, passengers on | 206 | Religions of India (tables) | 365 |
| Persian Gulf lines | 140 | Punjab | 49 |
| surveys | 141-5 | United Provinces | 44 |
| profits commence | 203 | Rent law-suits (table) | 561 |
| rebate system contract | 203 | Report of Currency Commission | 198 |
| revenue | 205 | Research Fund, Scientific | 414, 657 |
| Sara Bridge | 211 | Sanitation | 475 |
| Russian to Lake Urumia | 141 | Reserve Currency Notes | 188 |
| Tehran | 141 | Fund, Gold | 189-190 |
| scheme, Cairo to Koweit | 141 | Gold Standard | 179, 180, 197 |
| sleepers | 141 | Indian Army | 180 |
| South Indian | 310 | Reserve Metallic | 189 |
| Statistics | 211 | Retail | 335 |
| 205, 215-220 | 205, 215-220 | Revenue and Agricultural Department | 17 |
| Stall of | 209 | Baroda | 84 |
| tonnage | 206 | Bengal Presidency | 40 |
| traffic | 206 | Bihar and Orissa | 61 |
| Trans Persian | 143 | Burma | 57 |
| Map | 144 | Central Provinces | 67 |
| Turkish guarantee | 143 | Customs | 172 |
| two feet six inch gauge | 204 | District Boards | 411 |
| working statistics (tables) | 205-206 | Forest | 308 |
| Railfall | 285 | from imports | 171 |
| Assam | 73 | Government | 171 |
| Bihar and Orissa | 60 | Hyderabad | 81 |
| and Crops | 267 | Incidence of I | 170 |
| Madrass Presidency | 36 | Irrigation | 228 |
| North-West Frontier Provinces | 71 | Kashmir | 85 |
| Punjab | 49 | Land | 176 |
| Notes | 285 | Local government | 37 |
| Effect on budget | 172 | Madrass Presidency | 37 |
| Kashpia State | 101 | Mysore | 82 |
| Kashputana, Tara State of | 88 | opium | 172 |
| Agency | 86 | Post Office | 250 |
| Rasputa | 159 | railways | 174-5, 205 |
| Kandrag State | 99 | salt | 179 |
| Kampur State | 103 | System, Land | 170 |
| Hampoon Literary Society | 504 | tables of | 171-5 |
| Musical and Dramatic Society | 504 | telegraph | 230 |
| Port Trust | 414 | United Provinces | 46 |
| Railway | 078 | Rewa Kantha Agency | 100 |
| Kaustic Soda | 8 | Kewah State | 91 |
| Rate, Land | 259 | Rice, cultivation of | 208 |
| Rates and taxes, municipal | 499 | Rights of vend, Excluse | 178 |
| of interest money-lenders | 449 | Rights of citizenship | 466 |
| Native Hall, day court-system | 203 | of Native States | 79 |
| Reform of wills and measures | 435 | Ripon, Lord | 11 |
| Indian army | 156 | Rising in Bengal | 0 |
| —local | 450 | Roads, and Buildings Department, Bihar | 62 |
| Historical schools | 567 | and Orissa | 40 |
| Historians beyond Missionary Union | 507 | United Provinces | 55 |
| and | 511 | Burma | 222 |
| Historic, native students and | 502 | Expenditure | 11 |
| Historians of the | 502 | Roberts, Lord | 11 |

| | |
|-----|-----------------------------------|
| 176 | Roberts, Lord, on Aden |
| 177 | Roman Catholic Churches |
| 178 | Ross, Sir Hugh, march of |
| 179 | Routes to India from Europe |
| 180 | Royal Army Temperance Association |
| 181 | Isiatic Society (Bombay) |
| 182 | Indian Marine |
| 183 | Appointments |
| 184 | Society of Arts |
| 185 | Ryabtino S S Co |
| 186 | Rubber, Burma |
| 187 | Cultivation |
| 188 | Rulers of India, Abbar |
| 189 | Asoka |
| 190 | Avangzeb |
| 191 | Babar |
| 192 | Chandragupta |
| 193 | Gupta dynasty |
| 194 | Harsha |
| 195 | Harmayun |
| 196 | Islamomedan |
| 197 | Medieval dynasties |
| 198 | Mongolian kings |
| 199 | Mughal dynasty |
| 200 | Shahjahan |
| 201 | Southern dynasties |
| 202 | Indian chiefs, education of |
| 203 | War (continued) |
| 204 | Republics |
| 205 | In 1915 |
| 206 | Exchange value of |
| 207 | Gold |
| 208 | Gold coins |
| 209 | Gold |
| 210 | Gold |
| 211 | Gold |
| 212 | Gold |
| 213 | Gold |
| 214 | Gold |
| 215 | Gold |
| 216 | Gold |
| 217 | Gold |
| 218 | Gold |
| 219 | Gold |
| 220 | Gold |
| 221 | Gold |
| 222 | Gold |
| 223 | Gold |
| 224 | Gold |
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| 226 | Gold |
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| 276 | Gold |
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| 287 | Gold |
| 288 | Gold |
| 289 | Gold |
| 290 | Gold |
| 291 | Gold |
| 292 | Gold |
| 293 | Gold |
| 294 | Gold |
| 295 | Gold |
| 296 | Gold |
| 297 | Gold |
| 298 | Gold |
| 299 | Gold |
| 300 | Gold |

| Page | |
|----------|----------------------------------|
| 484 | Social institutions |
| 296 | —caste |
| 479 | —marriage |
| 270 | —reforms |
| 554-5 | —societies |
| 176 | Societies, Agricultural |
| 5 | —Life Insurance |
| 5 | —Literary, Scientific and Social |
| 504 | —Store |
| 521 | Sobag-Para Canal Colony |
| 372 | —Soil, Bengal Pres. |
| 354 | —Bomabay Pres. |
| 31 | —Central Prov. |
| 64 | —Indian Empire |
| 1 | —Punjab |
| 49 | —United Provinces |
| 117 | —varieties of |
| 107 | Sokotr Island |
| 124 | Soldiers, land for |
| 125 | South Africa, Indians in |
| 321 | —Indian Famine, 1878-8 |
| 657 | —Railways |
| 657 | —Railway |
| 101 | Southern dynasties |
| 7 | —India Chamber of Commerce |
| 348 | —North India, Country States |
| 99 | Spanish Consuls |
| 150 | Specie Bank failure |
| 265 | —Sport in India, athletics |
| 673 | —cricket |
| 680 | —football |
| 681 | —golf |
| 681 | —hockey |
| 679 | —paper-making |
| 679 | —point-to-point races |
| 673 | —racing |
| 679 | —tennis |
| 283 | —Spring months |
| 317 | Squadron, East Indies |
| 319-220 | Staff, Government Generals |
| 670 | Governors, Bengal Pres. |
| 154 | —Bombay Pres. |
| 223 | —Madras Pres. |
| 223, 225 | —Post Office |
| 227 | —Railway |
| 106 | Stamp Duties, Indian |
| 87 | Standard reserve gold |
| 331 | Star of India |
| 555 | State Bank for India |
| 419 | —forest distribution |
| 460 | —irrigation works |
| 659 | States, Native |
| 101 | —Kharbot, see Sholapur Agency |
| 59 | —Lwar |
| 484 | Service, Indian Medical |
| 296 | —Services, Educational |
| 479 | —Public Commission |
| 270 | —Season, culture of |
| 554-5 | —Season, Courts of |
| 176 | Settlement Officers' duties |
| 5 | —Settlements, Dutch |
| 5 | —European |
| 504 | Seva Sadan |
| 521 | Seventh Day Adventists Mission |
| 372 | —in towns |
| 68-9 | —Proportions of, in N W F P |
| 131 | Shah of Persia and the War |
| 4 | Shahjahan |
| 88 | Shinpur chiefship |
| 117 | Shabab for |
| 107 | Shan States |
| 124 | Shirgah concision |
| 125 | Shawl weaving |
| 657 | Ships Native Passenger |
| 657 | —commutice |
| 101 | Sholapur Agency |
| 7 | Shor, Sir John (Lord Teignmouth) |
| 258 | Shroff, banking by |
| 150 | Shrme Consuls |
| 150 | Shidnat in colonies |
| 156 | Shig of Delhi |
| 8, 154 | Shikhar |
| 374 | —education |
| 364 | —Shikhar |
| 153-6 | Shikhar, origin of |
| 92 | Shikhar State |
| 201-2 | Shikhar |
| 317 | Shikhar |
| 186 | Shikhar |
| 317 | Shikhar |
| 319-220 | Shikhar |
| 670 | Shikhar |
| 154 | Shikhar |
| 223 | Shikhar |
| 223, 225 | Shikhar |
| 227 | Shikhar |
| 106 | Shikhar |
| 87 | Shikhar |
| 331 | Shikhar |
| 555 | Shikhar |
| 419 | Shikhar |
| 460 | Shikhar |
| 659 | Shikhar |
| 101 | Shikhar |
| 59 | Shikhar |



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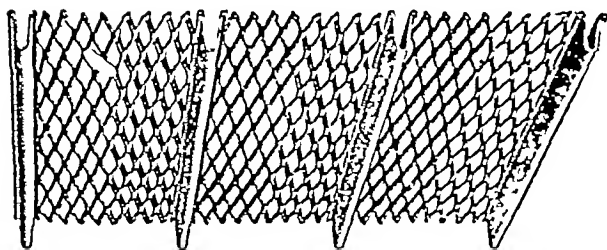
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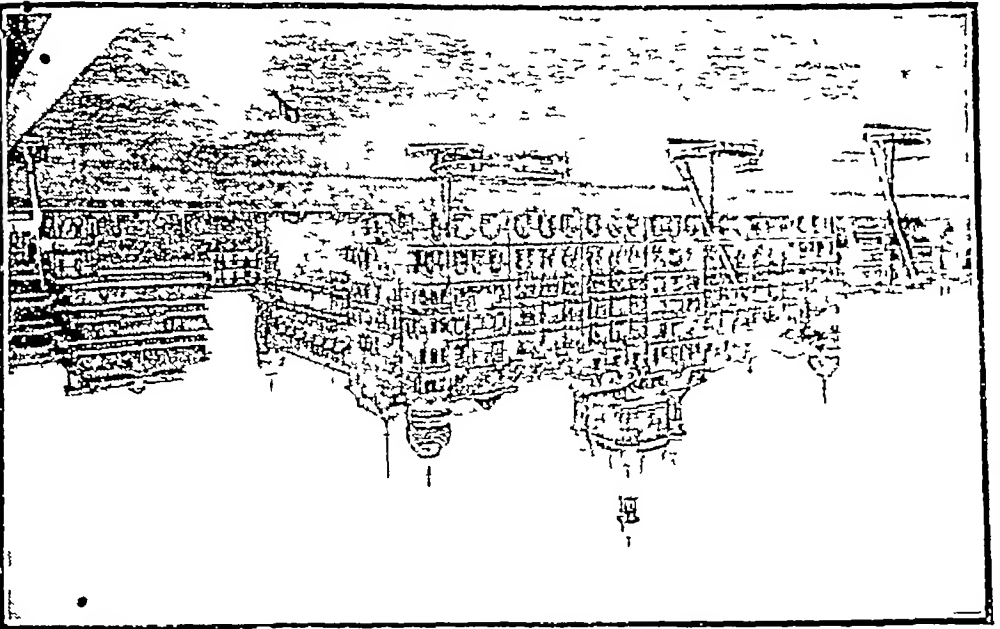
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